

WEST Search History

DATE: Thursday, May 12, 2005

Hide?	<u>Set Name</u>	<u>Query</u>	<u>Hit Count</u>
	<i>DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=ADJ</i>		
<input type="checkbox"/>	L24	L8 and (bush\$4 or ((plastic) with (casing or ring or enclosure or washer)) with sample)	1
<input type="checkbox"/>	L23	L7 and (bush\$4 or ((plastic) with (casing or ring or enclosure or washer)) with sample)	21
<input type="checkbox"/>	L22	L9 and (bush\$4 or ((plastic) with (casing or ring or enclosure or washer)) with sample)	1
<input type="checkbox"/>	L21	L20 and (bush\$4 or ((plastic) with (casing or ring or enclosure or washer)) with sample)	3
<input type="checkbox"/>	L20	L19 and (((outer with surface) or outside or external\$2 or outer or exterior or peripher\$4) with (groove or recess\$3 or inlay or inlaid or notch\$3 or thread))	32
<input type="checkbox"/>	L19	L18 and (finger)	105
<input type="checkbox"/>	L18	L17 and ((outer with surface) or outside or external\$2 or outer or exterior or peripher\$4)	112
<input type="checkbox"/>	L17	L16 and (spectrometer or spectroscopy or spectrograph or spectrum or spectra\$3)	112
<input type="checkbox"/>	L16	L15 and ((grip\$4 or hold\$3 or held or retain\$4 or "press-fit\$4" or "pressfit\$4") with (groove or recess\$3 or inlay or inlaid or notch\$3 or thread))	370
<input type="checkbox"/>	L15	L14 and (liquid or sample or capillary or capillary or tube or container or vessel or bush\$4 or vial)	5574
<input type="checkbox"/>	L14	L13 and (grip\$4 or hold\$3 or held or retain\$4 or "press-fit\$4" or "pressfit\$4")	5916
<input type="checkbox"/>	L13	L1 and (finger or bush\$4)	8295
<input type="checkbox"/>	L12	L10 and L1	8
<input type="checkbox"/>	L11	L10 and L2	1
<input type="checkbox"/>	L10	TSCHIRKY.in.	114
<input type="checkbox"/>	L9	L8 and ((grip\$4 or hold\$3 or held or retain\$4 or "press-fit\$4" or "pressfit\$4") with (groove or recess\$3 or inlay or inlaid or notch\$3 or thread))	12
<input type="checkbox"/>	L8	L7 and ((grip\$4 or hold\$3 or held or retain\$4 or "press-fit\$4" or "pressfit\$4") with (finger))	35
<input type="checkbox"/>	L7	L6 and (spectrometer or spectroscopy or spectrograph or spectrum or spectra\$3)	495
<input type="checkbox"/>	L6	L5 and ((liquid or sample or specimen or specimen or substance or substance) with (capillary or capillary or tube or container or vessel or brush\$4 or vial))	645
<input type="checkbox"/>	L5	L4 and (groove or recess\$3 or inlay or inlaid or notch\$3 or thread)	1750
<input type="checkbox"/>	L4	L3 and (liquid or sample or capillary or capillary or tube or container or vessel or brush\$4 or vial)	4178

<input type="checkbox"/>	L3	L2 and (grip\$4 or hold\$3 or held or retain\$4 or "press-fit\$4" or "pressfit\$4")	4518
<input type="checkbox"/>	L2	L1 and (finger)	6048
<input type="checkbox"/>	L1	((magnetic adj resonance) or MRI or NMR)	202618

END OF SEARCH HISTORY

Hit List

Clear	Generate Collection	Print	Fwd Refs	Bkwd Refs
Generate OACS				

Search Results - Record(s) 1 through 3 of 3 returned.

☐ 1. Document ID: US 20050062474 A1

L21: Entry 1 of 3

File: PGPB

Mar 24, 2005

PGPUB-DOCUMENT-NUMBER: 20050062474
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20050062474 A1

TITLE: NMR spectrometer with gripping device for handling a sample bushing with outer groove

PUBLICATION-DATE: March 24, 2005

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Tschirky, Hansjorg	Ettingen		CH	
Hochstrasser, Remo	Oberwil		CH	
Fey, Michael	Hornussen		CH	
Himmelsbach, Kurt	Fehraltorf		CH	

US-CL-CURRENT: 324/321; 324/306, 324/318

Full	Title	Station	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	DOC	Draw D
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☐ 2. Document ID: US 20050021037 A1

L21: Entry 2 of 3

File: PGPB

Jan 27, 2005

PGPUB-DOCUMENT-NUMBER: 20050021037
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20050021037 A1

TITLE: Image-guided navigated precision reamers

PUBLICATION-DATE: January 27, 2005

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
McCombs, Daniel L.	Germantown	TN	US	
Wheeler, Chester Paul	Hernando	MS	US	

US-CL-CURRENT: 606/79

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWC	Draw D
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☐ 3. Document ID: US 5198346 A

L21: Entry 3 of 3

File: USPT

Mar 30, 1993

US-PAT-NO: 5198346

DOCUMENT-IDENTIFIER: US 5198346 A

TITLE: Generation and selection of novel DNA-binding proteins and polypeptides

DATE-ISSUED: March 30, 1993

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Ladner; Robert C.	Ijamsville	MD		
Guterman; Sonia K.	Belmont	MA		
Kent; Rachel B.	Boxborough	MA		
Ley; Arthur C.	Newton	MA		

US-CL-CURRENT: 435/69.1; 435/252.3, 435/320.1, 435/489

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWC	Draw D
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Clear	Generate Collection	Print	Fwd Refs	Bkwd Refs	Generate OACS
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Term	Documents
PLASTIC	1566183
PLASTICS	532748
CASING	839219
CASINGS	78128
RING	2285063
RINGS	640960
ENCLOSURE	264217
ENCLOSURES	2
ENCLOUSURE	19
ENCLOSURES	41938
WASHER	327719
(L20 AND (BUSH\$4 OR ((PLASTIC) WITH (CASING OR RING OR ENCLOSURE OR WASHER)) WITH SAMPLE)).PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD.	3

There are more results than shown above. [Click here to view the entire set.](#)

Hit List

Clear	Generate Collection	Print	Fwd Refs	Bkwd Refs
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Search Results - Record(s) 1 through 1 of 1 returned.

☐ 1. Document ID: US 20050062474 A1

L22: Entry 1 of 1

File: PGPB

Mar 24, 2005

PGPUB-DOCUMENT-NUMBER: 20050062474

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20050062474 A1

TITLE: NMR spectrometer with gripping device for handling a sample bushing with outer groove

PUBLICATION-DATE: March 24, 2005

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Tschirky, Hansjorg	Ettingen		CH	
Hochstrasser, Remo	Oberwil		CH	
Fey, Michael	Hornussen		CH	
Himmelsbach, Kurt	Fehraltorf		CH	

US-CL-CURRENT: 324/321; 324/306, 324/318

Full	Title	Cratn	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	Publ	Drawings
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Clear	Generate Collection	Print	Fwd Refs	Bkwd Refs	Generate OACS
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Term	Documents
PLASTIC	1566183
PLASTICS	532748
CASING	839219
CASINGS	78128
RING	2285063
RINGS	640960
ENCLOSURE	264217
ENCLOSURES	2
ENCLOSURE	19
ENCLOSURES	41938

WASHER	327719
(L9 AND (BUSH\$4 OR ((PLASTIC) WITH (CASING OR RING OR ENCLOSURE OR WASHER)) WITH SAMPLE)).PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD.	1

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Generate OACS				

Search Results - Record(s) 1 through 1 of 1 returned.

☐ 1. Document ID: US 20050062474 A1

L24: Entry 1 of 1

File: PGPB

Mar 24, 2005

PGPUB-DOCUMENT-NUMBER: 20050062474

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20050062474 A1

TITLE: NMR spectrometer with gripping device for handling a sample bushing with outer groove

PUBLICATION-DATE: March 24, 2005

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Tschirky, Hansjorg	Ettingen		CH	
Hochstrasser, Remo	Oberwil		CH	
Fey, Michael	Hornussen		CH	
Himmelsbach, Kurt	Fehraltorf		CH	

US-CL-CURRENT: 324/321; 324/306, 324/318

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	Pub	Draw
------	-------	----------	-------	--------	----------------	------	-----------	-----------	-------------	--------	-----	------

Clear	Generate Collection	Print	Fwd Refs	Bkwd Refs	Generate OACS
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Term	Documents
PLASTIC	1566183
PLASTICS	532748
CASING	839219
CASINGS	78128
RING	2285063
RINGS	640960
ENCLOSURE	264217
ENCLOSURES	2
ENCLOSURE	19
ENCLOSURES	41938

WASHER	327719
(L8 AND (BUSH\$4 OR ((PLASTIC) WITH (CASING OR RING OR ENCLOSURE OR WASHER)) WITH SAMPLE)).PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD.	1

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NPL STIC Search

10689660

Databases History & Results 05/12/2005 12 May 2005

Ex. TAF

Set	Items	Description
S1	2611	AU= (TSCHIRKY H? OR TSCHIRKY, H? OR HOCHSTRASSER R? OR HOC- HSTRASSER R? OR FEY M? OR FEY, M? OR HIMMELSBACH K? OR HIMMEL- SBACH, K?)
S2	1882761	MRI OR MAGNETIC(W)RESONANC? OR NMR OR FTNMR OR FTMRI OR MA- GNETORESONANCE OR PMR OR PROTON(W)MAGNETIC(W)RESONAN? OR MR() (IMAGE OR IMAGING) OR MRA OR MRS
S3	10422	IC=(G01R-003 OR G01N-024/08 OR G01V-003/175 OR G01V-003/00 OR H01F-005/00)
S4	7079	MC=(S01-E02A2 OR S03-E07A OR S01-E02A8A OR S01-E02A1 OR S0- 3-E07C OR S05-D02B1 OR S03-C02F1)
S5	8414	CC=(A87601 OR B7510N)
S6	1888607	S2:S5
S7	313795	SPECTROMETER?
S8	148963	BUSH???? OR PLASTIC() (CASING OR RING? OR ENCLOSURE? OR WAS- HER?)
S9	4286570	GROOVE OR RIDGE OR THREAD? OR WIND???? OR NOTCH? ? OR RECC- ESS OR EDGE?
S10	4389114	GRIP? OR HANDL??? OR HOLD? OR RETAIN???? OR GRAB???? OR C- LENCH? OR CLAMP? OR PRESS()FIT?
S11	6519294	OUTER()SURFACE OR OUTSIDE? OR EXTERNAL? OR OUTER OR EXTERI- OR? OR PERIPHER????
S12	469582	FINGER? OR FINGER() (LIKE OR SPREAD? OR SEPARAT? OR EXTEND?) OR INTERDIGITAT? OR INTER()DIGITAT?
S13	17269	S6 AND S7
S14	3	S13 AND S1
S15	3	RD (unique items)
S16	400008	S8 OR SLEEVE?
S17	9	S16 AND S13
S18	7	S17 NOT S15
S19	7	RD (unique items)
S20	42	S9 AND S11 AND S13
S21	0	S8 AND S9 AND S11 AND S13
S22	7	S20 AND S10
S23	7	S22 NOT S19
S24	7	RD (unique items)
S25	6	S24 NOT S15
S26	1	S25 AND S12
S27	2	S13 AND (S16 OR S11 OR S9) AND S10 AND S12
S28	2	RD (unique items)
S29	0	S28 NOT (S15 OR S19 OR S24)
S30	59	S13 AND (S16 OR S11 OR S9) AND S10
S31	55	RD (unique items)
S32	45	S31 NOT (S15 OR S19 OR S24)
S33	42	S32 AND PY<=2003
S34	37	S13 AND S10 AND S11
S35	28	S34 NOT (S15 OR S19 OR S24)
S36	9	S34 NOT S35

? show files

File 2:INSPEC 1969-2005/Apr W4
(c) 2005 Institution of Electrical Engineers

File 155:MEDLINE(R) 1951-2005/May W2
(c) format only 2005 The Dialog Corp.

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(c) 2005 American Mathematical Society
File 347:JAPIO Nov 1976-2005/Jan(Updated 050506)
(c) 2005 JPO & JAPIO
File 305:Analytical Abstracts 1980-2005/May W1
(c) 2005 Royal Soc Chemistry
File 350:Derwent WPIX 1963-2005/UD,UM &UP=200529
(c) 2005 Thomson Derwent

?

15/3,K/1 (Item 1 from file: 347)
 DIALOG(R)File 347:JAPIO
 (c) 2005 JPO & JAPIO. All rts. reserv.

07442607 **Image available**
 APPARATUS FOR TRANSPORTING AND ACCURATELY POSITIONING SAMPLE TUBE IN HIGH
 RESOLUTION **NMR SPECTROMETER**

PUB. NO.: 2002-311118 [JP 2002311118 A]
 PUBLISHED: October 23, 2002 (20021023)
 INVENTOR(s): **TSCHIRKY HANSJOERG**
 WARDEN MICHAEL
 SEYDOUX ROBERTO
 MAREK DANIEL
 APPLICANT(s): BRUKER BIOSPIN AG
 APPL. NO.: 2002-066018 [JP 200266018]
 FILED: March 11, 2002 (20020311)
 PRIORITY: 01 10111674 [DE 10111674], DE (Germany), March 09, 2001
 (20010309)

*N/A TAF
 5/12/2005*

APPARATUS FOR TRANSPORTING AND ACCURATELY POSITIONING SAMPLE TUBE IN HIGH
 RESOLUTION **NMR SPECTROMETER**

INVENTOR(s): **TSCHIRKY HANSJOERG**
 WARDEN MICHAEL
 SEYDOUX ROBERTO
 MAREK DANIEL

ABSTRACT

PROBLEM TO BE SOLVED: To improve an apparatus for transporting an **NMR** measuring capillary so that danger is eliminated and glass is protected, using a simple technique...

...2 on an air cushion and can be positioned with the vertical axis of an **NMR** receiving coil system 9 therein, and comprises a mounting sleeve 17 disposed radially around the...

15/3,K/2 (Item 1 from file: 350)
 DIALOG(R)File 350:Derwent WPIX
 (c) 2005 Thomson Derwent. All rts. reserv.

015855711 **Image available**
 WPI Acc No: 2004-013541/200402
 XRAM Acc No: C04-004375
 XRPX Acc No: N04-010086

Nuclear spin resonance spectrometer, for structural analysis of chemical compounds, comprises sample sleeve surrounding sample tube, and handling unit with fingers for handling sample sleeve

Patent Assignee: BRUKER BIOSPIN AG (BRUK-N)
 Inventor: **FEY M ; HIMMELSBACH K ; HOCHSTRASSER R ; TSCHIRKY H**
 Number of Countries: 002 Number of Patents: 002
 Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
DE 20314517	U1	20031120	DE U20314517	U	20030919	200402 B
US 20050062474	A1	20050324	US 2003689660	A	20031022	200526

Priority Applications (No Type Date): DE U20314517 U 20030919
 Patent Details:

*Applicants own Application
 N/A TAF 5/12/2005*

Patent No Kind Lan Pg Main IPC Filing Notes
DE 20314517 U1 21 G01R-033/30
US 20050062474 A1 G01V-003/00

Nuclear spin resonance spectrometer , for structural analysis of chemical compounds, comprises sample sleeve surrounding sample tube, and handling unit...

Inventor: FEY M ...

... HIMMELSBACH K ...

... HOCHSTRASSER R ...

... TSCHIRKY H

Abstract (Basic):

... Nuclear spin resonance **spectrometer** comprises a sample sleeve surrounding a sample tube and having a bore into which the...

... Nuclear spin resonance **spectrometer** comprises a sample sleeve (1) surrounding a sample tube and having a bore into which...

...An INDEPENDENT CLAIM is also included for a sample sleeve used in the **spectrometer** .

Technology Focus:

... Preferred **Spectrometer** : The handling unit has at least four fingers which each have a conical or round...

...International Patent Class (Main): G01V-003/00

15/3,K/3 (Item 2 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2005 Thomson Derwent. All rts. reserv.

NA TAF 5/12/2005

014825313 **Image available**
WPI Acc No: 2002-646019/200270
XRPX Acc No: N02-510797

Positioning of NMR samples in the measurement region of a NMR spectrometer using a mounting housing for a glass sample capillary tube that allows smaller diameter tubes to be used without causing high breakage rates

Patent Assignee: BRUKER BIOSPIN AG (BRUK-N); SPECTROSPIN AG (SPEC-N); MAREK D (MARE-I); SEYDOUX R (SEYD-I); TSCHIRKY H (TSCH-I); WARDEN M (WARD-I)

Inventor: MAREK D; SEYDOUX R; **TSCHIRKY H** ; WARDEN M

Number of Countries: 028 Number of Patents: 006

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 1239295	A2	20020911	EP 20024159	A	20020226	200270 B
DE 10111674	A1	20020926	DE 1011674	A	20010309	200271
JP 2002311118	A	20021023	JP 200266018	A	20020311	200302
US 20020196022	A1	20021226	US 200286347	A	20020304	200304
DE 10111674	C2	20030206	DE 1011674	A	20010309	200312
US 6686740	B2	20040203	US 200286347	A	20020304	200413

Priority Applications (No Type Date): DE 1011674 A 20010309

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes
EP 1239295 A2 G 12 G01R-033/30

Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT
LI LT LU LV MC MK NL PT RO SE SI TR

DE 10111674 A1 G01R-033/30

JP 2002311118 A 9 G01R-033/32
US 20020196022 A1 G01V-003/00
DE 10111674 C2 G01R-033/30
US 6686740 B2 G01V-003/00

Positioning of NMR samples in the measurement region of a NMR spectrometer using a mounting housing for a glass sample capillary tube that allows smaller diameter tubes...

...Inventor: **TSCHIRKY H**

Abstract (Basic):

... for transport of an elongated sample tube (8) into the measurement space (22) of a **NMR** measurement system. The sample tube is supported on an air cushion together with a spinner...

... Positioning of **NMR** samples in the measurement region of a **NMR spectrometer** .

...

...The transport device for **NMR** measurement capillary tubes is modified so that there are less glass breakages and smaller diameter...

...Figure shows a schematic vertical section through a **NMR** sample head with inventive centering device and an inventive modified spinner and mounting house

...Title Terms: **NMR** ;

...International Patent Class (Main): **G01V-003/00**

Manual Codes (EPI/S-X): **S01-E02A1** ...

... **S03-E07C**

?

19/3,K/1 (Item 1 from file: 2)

DIALOG(R)File 2:INSPEC

(c) 2005 Institution of Electrical Engineers. All rts. reserv.

03736829 INSPEC Abstract Number: A90136279

Title: Novel high-frequency resonator for NMR imaging and spectroscopy

Author(s): van Vaals, J.J.; Bergman, A.H.

Author Affiliation: Philips Res. Labs., Eindhoven, Netherlands

Journal: Journal of Magnetic Resonance vol.89, no.2 p.331-42

Publication Date: Sept. 1990 Country of Publication: USA

CODEN: JOMRA4 ISSN: 0022-2364

U.S. Copyright Clearance Center Code: 0022-2364/90/\$3.00

Language: English

Subfile: A

Title: Novel high-frequency resonator for NMR imaging and spectroscopy

Abstract: A new type of RF coil for NMR imaging and spectroscopy is described. The resonator is simple to assemble and is particularly suited

...

... to serve as a Faraday shield, enclosing the inner conductors which are positioned on a sleeve around the measurement region. The generated RF field shows good homogeneity. The coil is very...

... 270 MHz coil with inner diameter of 7 cm are given, and experimental in vivo NMR results using this probe in a horizontal-bore 6.3 T animal system are presented.

Descriptors: nuclear magnetic resonance spectroscopy...

... spectrometer components and accessories

Identifiers: NMR spectroscopy...

NA TAF 5/12/2005

...in vivo NMR experiments...

... NMR imaging

19/3,K/2 (Item 2 from file: 2)

DIALOG(R)File 2:INSPEC

(c) 2005 Institution of Electrical Engineers. All rts. reserv.

00903477 INSPEC Abstract Number: A76042970

Title: Method for obtaining spectra from sub-milligram quantities in continuous wave nuclear magnetic resonance spectrometry

Author(s): Stewart, J.L.; Clapp, W.L.

Author Affiliation: R.J. Reynolds Tobacco Co., Res. Dept., Winston-Salem, NC, USA

Journal: Analytical Chemistry vol.48, no.3 p.629-30

Publication Date: March 1976 Country of Publication: USA

CODEN: ANCHAM ISSN: 0003-2700

Language: English

Subfile: A

Title: Method for obtaining spectra from sub-milligram quantities in continuous wave nuclear magnetic resonance spectrometry

Abstract: The use of microcells in NMR spectroscopy is briefly discussed. The problems of obtaining maximum signal to noise ratio from a

...

... problems is described. By heat sealing a gas chromatographic collection

tube, and using a Teflon **sleeve** fitted inside a stock turbine, improved signal to noise ratio and reproducibility can be obtained...

...Descriptors: radiofrequency **spectrometers** ; ...

... **spectrometer** components and accessories

...Identifiers: Teflon **sleeve** ; ...

N/A TAF 5/12/2005

...continuous wave **NMR** spectrometry

19/3,K/3 (Item 1 from file: 5)

DIALOG(R)File 5:BIOSIS Previews(R)

(c) 2005 BIOSIS. All rts. reserv.

0011566379 BIOSIS NO.: 199800360626

Spectroscopic characterization of a binuclear metal site in Bacillus cereus beta-lactamase II

AUTHOR: Orellano Elena G; Giarardini Javier E; Cricco Julia A; Ceccarelli Eduardo A; Vila Alejandro J (Reprint)

AUTHOR ADDRESS: Area Biofisica, Dep. Quim. Biol., Fac. Ciencias Bioquim. Farm., Suipacha 31, 2000 Rosario, Argentina**Argentina

JOURNAL: Biochemistry 37 (28): p10173-10180 July 14, 1998 1998

MEDIUM: print

ISSN: 0006-2960

DOCUMENT TYPE: Article

RECORD TYPE: Abstract

LANGUAGE: English

...ABSTRACT: Zn(II)Co(II) derivative of betaLII were obtained and probed by electronic and paramagnetic **NMR** spectroscopy. In the high-affinity site, the metal is bound to three His residues and...

...the binuclear metal site of the Bacteroides fragilis beta-lactamase (Concha, N., Rasmussen, B. A., **Bush**, K., and Herzberg, O. (1996) Structure 4, 823-836; Carfi, A., Duee, E., Paul-Soto...

DESCRIPTORS:

METHODS & EQUIPMENT: electronic **NMR** spectroscopy: analytical method, spectroscopic techniques...

...paramagnetic **NMR** spectroscopy: analytical method, spectroscopic techniques...

...Beckman DU 620 **spectrometer** --...

...Bruker ACE 200 **spectrometer** --...

...Bruker MSL 300 **spectrometer** --...

...Gilford Response II **spectrometer** --...

...Ultraspec II LKB **spectrometer** --

N/A TAF 5/12/2005

19/3,K/4 (Item 1 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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009924708 **Image available**

WPI Acc No: 1994-192419/199424

XRFX Acc No: N94-151400

Probe head for NMR spectrometer , esp.for examining small animals - includes screening device for HF coil provided by radial strips extending in axial direction of housing

Patent Assignee: GUENTHER GMBH EBERHARD (GUEN-N)

Inventor: GUENTHER U

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
DE 4240434	A1	19940609	DE 4240434	A	19921202	199424 B

Priority Applications (No Type Date): DE 4240434 A 19921202

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
DE 4240434	A1	4	G01R-033/30	Add to patent DE 4201440	

Probe head for NMR spectrometer , esp.for examining small animals...

...Abstract (Basic): The probe head has a tubular housing (2) enclosing an axially movable reception **sleeve** (3) of shorter length, in which a mouse or rat to be analysed is contained...

...Title Terms: **NMR** ;

...Manual Codes (EPI/S-X): **S05-D02B1**

N/A 5-12-2005 TAF

19/3,K/5 (Item 2 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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007821553 **Image available**

WPI Acc No: 1989-086665/198912

XRPX Acc No: N89-066080

Spectrometer cryomagnet enabling insertion and removal of sample - uses pressurised air for feeding sample holder between access position and measuring zone

Patent Assignee: SPECTROSPIN AG (SPEC-N)

Inventor: KUSTER A

Number of Countries: 006 Number of Patents: 006

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
DE 3729819	A	19890316	DE 3729819	A	19870905	198912 B
EP 308654	A	19890329	EP 88113492	A	19880819	198913
US 4859948	A	19890822	US 88238043	A	19880829	198942
DE 3729819	C	19911107				199145
EP 308654	B	19920401	EP 88113492	A	19880819	199214
DE 3869713	G	19920507	DE 3729819	A	19870905	199220

Priority Applications (No Type Date): DE 3729819 A 19870905

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
DE 3729819	A	8			
EP 308654	A	G			

Designated States (Regional): CH DE FR GB LI

US 4859948 A 8

EP 308654 B 11

Designated States (Regional): CH DE FR GB LI

Designated States (Regional): CH DE FR GB LI

Spectrometer cryomagnet enabling insertion and removal of sample...

...Abstract (Basic): a vertical axis with a central space (1) aligned with the latter contg. a guide **sleeve** (3) enclosing the sample holder (4).

The guide **sleeve** is coupled at its base to a pressurised air source (6), which is operated to force the sample holder out through the top of the guide **sleeve** to allow the sample to be replaced...

- ...A switching device (11) at the top of the guide **sleeve**, operated by a manually accessible device, allows the sample holder to be removed and replaced...
- ...Abstract (Equivalent): Apparatus for supplying a sample carrier (4, 44) in the case of an **NMR spectrometer** comprising an intense field cryomagnet (2, 41) which has a vertically disposed axis and generates ...
- ...Abstract (Equivalent): In the **NMR spectrometer** comprising a cryo-magnet with vertical axis, the sample to be examined is introduced into...
- ...International Patent Class (Additional): G01N-024/08

NA 5-12-2005 TAF

19/3,K/6 (Item 3 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2005 Thomson Derwent. All rts. reserv.

007424055 **Image available**
WPI Acc No: 1988-057990/198809
Related WPI Acc No: 1986-049807; 1987-064908; 1988-098685; 1988-190390;
1989-055669; 1989-152592; 1990-022196; 1990-099524; 1991-045875;
1992-270499
XRPX Acc No: N88-044068
Magnetic resonance **imaging appts. for spectrometer - has two capacitive networks arranged to adjust capacitive loading at either end of resonator coil**

Patent Assignee: PICKER INT INC (PXRMI)
Inventor: MISIC G J; PATRICK J L
Number of Countries: 005 Number of Patents: 002
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 257782	A	19880302	EP 87306426	A	19870720	198809 B
US 4740751	A	19880426	US 86894313	A	19860807	198819

Priority Applications (No Type Date): US 86894313 A 19860807; US 84641570 A 19840816

Patent Details:
Patent No Kind Lan Pg Main IPC Filing Notes
EP 257782 A E 12
Designated States (Regional): DE FR GB NL
US 4740751 A 11

Magnetic resonance **imaging appts. for spectrometer -**

- ...Abstract (Equivalent): The resonator coil assembly includes a dielectric **sleeve** on which a first resonator coil portion and a second resonator coil portion, each of copper foil, are adhered. The dielectric **sleeve** is dimensioned to receive a human torso. A pair of adjustable tuning capacitances and a...
- ...Title Terms: **NMR**

NA TAF 5/14/2005

19/3,K/7 (Item 4 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2005 Thomson Derwent. All rts. reserv.

002328454

WPI Acc No: 1980-D4890C/198016

Nuclear magnetic resonance spectrometer - has spinning appts. with sleeve displaceable on body to form sample chamber and gas bearing

Patent Assignee: IBM CORP (IBMC)

Inventor: FYFE C A; MOSSBRUGGE H G; YANNONI C S

Number of Countries: 004 Number of Patents: 004

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 9535	A	19800416				198016 B
US 4201941	A	19800506				198020
EP 9535	B	19811014				198143
DE 2961002	G	19811224				198201

Priority Applications (No Type Date): US 78930846 A 19780804

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
EP 9535	A	E			

Designated States (Regional): DE FR GB

EP 9535 B E
Designated States (Regional): DE FR GB

Nuclear magnetic resonance spectrometer - ...

...has spinning appts. with sleeve displaceable on body to form sample chamber and gas bearing

...Abstract (Basic): The spinning appts. for the nuclear **magnetic resonance (NMR) spectrometers** includes a non-magnetic assembly having a **sleeve** (58) which can be displaced relative to a body (52), to allow a sample or...

...70) to be inserted in or removed from a chamber, formed between the body and **sleeve** . The chamber has a gas flow path (68) which forms a gas bearing, on which...

...In an **NMR spectrometer** , the spinning appts. is mounted so that the spin axis of the sample or sample...

...lies in the plane defined by a high d.c. magnetic field axis of the **spectrometer** , and the axis of an excitation coil of the **spectrometer**

...Title Terms: **SLEEVE** ;

?

N/A TAF 5/12/2005

26/9/1 (Item 1 from file: 350)
DIALOG(R) File 350:Derwent WPIX
(c) 2005 Thomson Derwent. All rts. reserv.

015330782 **Image available**
WPI Acc No: 2003-391717/200337
XRAM Acc No: C03-104052
XRPX Acc No: N03-312891

Nuclear magnetic resonance sample holder for nuclear magnetic resonance spectrometer liquid microsamples, comprises rotor, cylindrical plunger, hollow cylindrical sample tube, clamp, and seal
Patent Assignee: BRUKER BIOSPIN GMBH (BRUK-N)
Inventor: BRAUMANN E U; HOFMANN M
Number of Countries: 003 Number of Patents: 004
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 20020196023	A1	20021226	US 2002161746	A	20020605	200337 B
DE 1020130283	C1	20030313	DE 12001030283	A	20010626	200337
GB 2381316	A	20030430	GB 200214530	A	20020624	200337
US 6741079	B2	20040525	US 2002161746	A	20020605	200435

Priority Applications (No Type Date): DE 12001030283 A 20010626

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 20020196023	A1		17	G01V-003/00	
DE 1020130283	C1			G01R-033/30	
GB 2381316	A			G01R-033/30	
US 6741079	B2			G01V-003/00	

Abstract (Basic): US 20020196023 A1

NOVELTY - A nuclear **magnetic resonance** sample holder comprises a rotationally symmetrical rotor having a central bore with a conical end region; a cylindrical, moveable plunger having a thicker and thinner region; a hollow cylindrical sample tube made of glass or quartz; a **clamp** with a cylindrical part and a central blind hole; and a seal installed within the **clamp**.

DETAILED DESCRIPTION - A nuclear **magnetic resonance** (NMR) sample holder (1) for an NMR spectrometer with liquid microsamples comprises:

(1) a rotationally symmetrical rotor having a central bore with a conical end region;
(2) a cylindrical, moveable plunger having a thicker region and thinner region which is inserted into the central bore of the rotor;
(3) a hollow cylindrical sample tube made of glass or quartz, having a closed and an open end, the tube having a constant **outer** diameter of less than 11 mm along its entire length;
(4) a **clamp** with a cylinder part that fits into the central bore of the rotor, and a central blind hole located at a second **clamp** end; and

(5) a seal installed within the **clamp** to seal the open end of the sample tube in a gas-tight manner after insertion of the sample tube in the central blind hole.

The plunger comprises a mounting mechanism at an inserted end of the thinner region. The **clamp** cooperates with the mounting mechanism at a first **clamp** end. It has an **outer** cone with spreading **fingers** structured for **clamping** within the conical end region of the central bore, centering and safely **holding** the sample tube. The central blind hole is slightly larger than the constant **outer** diameter of the sample tube, to accept the sample tube within an inner bore of the blind hole of the **clamp**.

NA TAF 5-6-2005

Already Applied as Prior Art

See 1st Office Action 12-15-2004

An INDEPENDENT CLAIM is included for a method for filling the inventive **NMR sample holder** comprising filling a liquid microsample into the sample tube, pushing the **clamp** over the sample tube, inserting the plunger into the central bore of the rotor, inserting the sample tube into the blind hole and screwing a **thread** of the **clamp** into a mating **thread** on the movable plunger mounting section.

USE - For an **NMR spectrometer** with liquid microsamples.

ADVANTAGE - The inventive **NMR sample holder** permits automatic **spectrometer** operation, providing simpler, safer and improved **handling**. The **NMR sample holder** is less susceptible to centering errors, where the amount of evaporated liquid sample is to be reduced. It allows sample tubes to be fixed in which nearly no sample liquid is lost.

DESCRIPTION OF DRAWING(S) - The figures show an overall view of the sample **holder** and an overall view of the sample **holder** with a released sample tube.

Nuclear **magnetic resonance** sample **holder** (1)

pp; 17 DwgNo 1a, 1b/4

Technology Focus:

TECHNOLOGY FOCUS - INSTRUMENTATION AND TESTING - Preferred Component: The central bore of the rotor further comprises a helical spring within the widened inner diameter.

Preferred Condition: The sample tube has an axial length of 80-120 mm and an inner diameter of 1-5 mm. The plunger has a total length of 90-130 mm. The cylindrical regions of the rotor have **outer** diameters of 25 and 17 mm, respectively. The thicker region of the plunger has a diameter of 5-10, preferably 8 mm.

Preferred Material: The helical spring is made from non-magnetic material.

POLYMERS - Preferred Material: The rotor, plunger, seal and/or **clamp** comprise a plastic material comprising a small amount of protons. The plastic material is Teflon (RTM: polytetrafluoroethylene).

Title Terms: NUCLEAR; MAGNETIC; RESONANCE; SAMPLE; **HOLD**; NUCLEAR; MAGNETIC; RESONANCE; SPECTROSCOPE; LIQUID; COMPRISE; ROTOR; CYLINDER; PLUNGE; HOLLOW; CYLINDER; SAMPLE; TUBE; **CLAMP**; SEAL

Derwent Class: A89; S03

International Patent Class (Main): G01R-033/30; **G01V-003/00**

International Patent Class (Additional): **G01N-024/08**

File Segment: CPI; EPI

Manual Codes (CPI/A-N): A12-H00H; A12-L04B

Manual Codes (EPI/S-X): S03-C02; S03-C02B

Polymer Indexing (PS):

<01>

001 018; H-; R00975 G0022 D01 D12 D10 D51 D53 D59 D69 D82 F- 7A; H0000; P0511

002 018; ND01; Q9999 Q7794-R; Q9999 Q7874

?

24/3,K/1 (Item 1 from file: 350)
 DIALOG(R)File 350:Derwent WPIX
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015855711 **Image available**
 WPI Acc No: 2004-013541/200402
 XRAM Acc No: C04-004375
 XRPX Acc No: N04-010086

Nuclear spin resonance spectrometer , for structural analysis of chemical compounds, comprises sample sleeve surrounding sample tube, and handling unit with fingers for handling sample sleeve

Patent Assignee: BRUKER BIOSPIN AG (BRUK-N)
 Inventor: FEY M; HIMMELSBACH K; HOCHSTRASSER R; TSCHIRKY H
 Number of Countries: 002 Number of Patents: 002
 Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
DE 20314517	U1	20031120	DE U20314517	U	20030919	200402 B
US 20050062474	A1	20050324	US 2003689660	A	20031022	200526

Priority Applications (No Type Date): DE U20314517 U 20030919

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
DE 20314517	U1	21	G01R-033/30		
US 20050062474	A1		G01V-003/00		

Nuclear spin resonance spectrometer , for structural analysis of chemical compounds, comprises sample sleeve surrounding sample tube, and handling unit with fingers for handling sample sleeve

Abstract (Basic):

... Nuclear spin resonance **spectrometer** comprises a sample sleeve surrounding a sample tube and having a bore into which the tube is inserted. The sample sleeve has grooves on its **outer periphery** . A **handling** unit enables **handling** of the sample sleeve and has fingers. At least one **groove** is structured so that the fingers can be inserted into the **groove** .

... Nuclear spin resonance **spectrometer** comprises a sample sleeve (1) surrounding a sample tube and having a bore into which...

...runs along the cylinder axis. The sample sleeve has grooves (2, 3a, 3b) on its **outer periphery** . A **handling** unit enables **handling** of the sample sleeve and has fingers. At least one **groove** (2) is structured so that the fingers can be inserted into the **groove** . The fingers press on both **outer edges** of the **groove** when the **handling** unit is closed...

...An INDEPENDENT CLAIM is also included for a sample sleeve used in the **spectrometer** .

...The sample sleeve can be easily and safely **handled** .

Technology Focus:

... Preferred **Spectrometer** : The **handling** unit has at least four fingers which each have a conical or round attachment radially...

...Title Terms: **HANDLE** ;

...International Patent Class (Main): **G01V-003/00**

24/3,K/2 (Item 2 from file: 350)
 DIALOG(R)File 350:Derwent WPIX

Applicant's own work
TAF 5/21/2005
Not Applicable

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015330782 **Image available**
WPI Acc No: 2003-391717/200337
XRAM Acc No: C03-104052
XRPX Acc No: N03-312891

N/A TAF 5-12-2005

Nuclear magnetic resonance sample holder for nuclear magnetic resonance spectrometer liquid microsamples, comprises rotor, cylindrical plunger, hollow cylindrical sample tube, clamp, and seal

Patent Assignee: BRUKER BIOSPIN GMBH (BRUK-N)

Inventor: BRAUMANN E U; HOFMANN M

Number of Countries: 003 Number of Patents: 004

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 20020196023	A1	20021226	US 2002161746	A	20020605	200337 B
DE 1020130283	C1	20030313	DE 12001030283	A	20010626	200337
GB 2381316	A	20030430	GB 200214530	A	20020624	200337
US 6741079	B2	20040525	US 2002161746	A	20020605	200435

Priority Applications (No Type Date): DE 12001030283 A 20010626

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 20020196023	A1		17	G01V-003/00	
DE 1020130283	C1			G01R-033/30	
GB 2381316	A			G01R-033/30	
US 6741079	B2			G01V-003/00	

Nuclear magnetic resonance sample holder for nuclear magnetic resonance spectrometer liquid microsamples, comprises rotor, cylindrical plunger, hollow cylindrical sample tube, clamp, and seal

Abstract (Basic):

... A nuclear **magnetic resonance** sample holder comprises a rotationally symmetrical rotor having a central bore with a conical end region; a...

...thicker and thinner region; a hollow cylindrical sample tube made of glass or quartz; a **clamp** with a cylindrical part and a central blind hole; and a seal installed within the **clamp**.

... A nuclear **magnetic resonance** (**NMR**) sample holder (1) for an **NMR spectrometer** with liquid microsamples comprises...

...glass or quartz, having a closed and an open end, the tube having a constant **outer** diameter of less than 11 mm along its entire length...

...4) a **clamp** with a cylinder part that fits into the central bore of the rotor, and a central blind hole located at a second **clamp** end; and...

...5) a seal installed within the **clamp** to seal the open end of the sample tube in a gas-tight manner after...

...The plunger comprises a mounting mechanism at an inserted end of the thinner region. The **clamp** cooperates with the mounting mechanism at a first **clamp** end. It has an **outer** cone with spreading fingers structured for **clamping** within the conical end region of the central bore, centering and safely **holding** the sample tube. The central blind hole is slightly larger than the constant **outer** diameter of the sample tube, to accept the sample tube within an inner bore of the blind hole of the **clamp**.

...

...An INDEPENDENT CLAIM is included for a method for filling the inventive **NMR sample holder** comprising filling a liquid microsample into the sample tube, pushing the **clamp** over the sample tube, inserting the plunger into the central bore of the rotor, inserting the sample tube into the blind hole and screwing a **thread** of the **clamp** into a mating **thread** on the movable plunger mounting section...

...For an **NMR spectrometer** with liquid microsamples...

...The inventive **NMR sample holder** permits automatic **spectrometer** operation, providing simpler, safer and improved **handling**. The **NMR sample holder** is less susceptible to centering errors, where the amount of evaporated liquid sample is to...

...The figures show an overall view of the sample **holder** and an overall view of the sample **holder** with a released sample tube...

...Nuclear **magnetic resonance sample holder** (1

Technology Focus:

... has a total length of 90-130 mm. The cylindrical regions of the rotor have **outer** diameters of 25 and 17 mm, respectively. The thicker region of the plunger has a...

...Preferred Material: The rotor, plunger, seal and/or **clamp** comprise a plastic material comprising a small amount of protons. The plastic material is Teflon...

...Title Terms: **HOLD** ;

...International Patent Class (Main): **G01V-003/00**

International Patent Class (Additional): **G01N-024/08**

24/3,K/3 (Item 3 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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015239470 **Image available**

WPI Acc No: 2003-300396/200329

XRAM Acc No: C03-078098

XRPX Acc No: N03-239106

Apparatus for performing electrochemical assay or a reaction, comprises a micro-chip possessing a microstructure having a tip end adapted for fluid uptake or discharge and a microfluidic control unit

Patent Assignee: DIAGNOSWISS SA (DIAG-N); MICHEL P (MICH-I); REYMOND F (REYM-I); ROSSIER J S (ROSS-I)

Inventor: MICHEL P; REYMOND F; ROSSIER J S

Number of Countries: 101 Number of Patents: 005

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 200304160	A1	20030116	WO 2002IB3220	A	20020704	200329 B
EP 1404448	A1	20040407	EP 2002765157	A	20020704	200425
			WO 2002IB3220	A	20020704	
AU 2002329526	A1	20030121	AU 2002329526	A	20020704	200452
US 20040166504	A1	20040826	WO 2002IB3220	A	20020704	200457
			US 2003481152	A	20031217	
JP 2005501231	W	20050113	WO 2002IB3220	A	20020704	200506
			JP 2003510164	A	20020704	

Priority Applications (No Type Date): GB 200116384 A 20010704

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

WO 200304160 A1 E 46 B01L-003/00

N/A 5-12-2005 TPA

Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA
CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN
IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ
OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU
ZA ZM ZW

Designated States (Regional): AT BE BG CH CY CZ DE DK EA EE ES FI FR GB
GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SK SL SZ TR TZ UG ZM ZW

EP 1404448 A1 E B01L-003/00 Based on patent WO 200304160

Designated States (Regional): AL AT BE BG CH CY CZ DE DK EE ES FI FR GB
GR IE IT LI LT LU LV MC MK NL PT RO SE SI SK TR

AU 2002329526 A1 B01L-003/00 Based on patent WO 200304160

US 20040166504 A1 C12Q-001/68

JP 2005501231 W 66 G01N-027/06 Based on patent WO 200304160

Abstract (Basic):

... injected into a purification, separation and/or detection
device, for e.g. a chromatograph, a **spectrometer**, a photometer, a
gel, a column, a selective membrane, a filter or an electrophoretic
separation...

...mass spectrometry. The apparatus comprises units to desalt samples prior
to injection into a mass **spectrometer** by generation of an
electrospray or prior to dispense of the samples onto a matrix...

Technology Focus:

... embossing, plasma etching, elastomer casting and/or silicone
technology. (I) further comprises a detector disposed **outside** the
microstructure, the detector being interfaced with the microchips where
the detector is photomultiplier, a mass **spectrometer** or a nuclear
magnetic resonance (NMR) system. The microstructure comprises a
microchannel, or a network or array of interconnected microchannels
where...

...binding. The membrane physically separates two solutions or phases. The
tip is formed at the **edge** of the microchip and has a pyramidal,
parallelopipedic or conical shape. The tip is adapted...

...by a fluid reservoir (18). The tip comprises an electrode. The
supporting unit comprises a **clamping** system to ensure fluid-tight
connection between the microfluidic connection end(s) and the
microfluidic...

24/3,K/4 (Item 4 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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N/A TAF 5/12/2005

010474464 **Image available**

WPI Acc No: 1995-375784/199549

XRAM Acc No: C95-162713

XRPX Acc No: N95-277260

NMR spectrometer **microlitre sample holder** - comprises rotor with
central blind threaded bore for receiving sample tube with screw
engaging thread and centring tube and having seal between tube and bore
Patent Assignee: BRUKER ANALYTISCHE MESSTECHNIK GMBH (BRUK-N); BRUKER
ANALYTIK GMBH (BRUK-N)

Inventor: HOFMANN M; SPRAUL M

Number of Countries: 003 Number of Patents: 005

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
GB 2289341	A	19951115	GB 958539	A	19950427	199549 B

DE 19509062	A1	19951123	DE 1009062	A	19950314	199601
US 5517856	A	19960521	US 95435879	A	19950505	199626
DE 19509062	C2	19970213	DE 1009062	A	19950314	199711
GB 2289341	B	19980408	GB 958539	A	19950427	199816

Priority Applications (No Type Date): DE 4416612 A 19940511

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
GB 2289341	A		26	G01R-033/30	
DE 19509062	A1		10	G01R-033/30	
US 5517856	A		10	G01R-033/20	
DE 19509062	C2		10	G01R-033/30	
GB 2289341	B			G01R-033/30	

NATF 5-12-2005

NMR spectrometer microlitre sample holder - ...

...comprises rotor with central blind threaded bore for receiving sample tube with screw engaging thread and centring tube and having seal between tube and bore

...Abstract (Basic): A sample holder is provided for an NMR spectrometer for microlitre range samples comprising a rotor with a central blind base with an internal thread over at least part of its length, a hollow sample tube accommodatable in the bore; a centring screw engageable with the thread of the rotor bore and having a central bore for holding the tube and centring it; and a sealing element which is a sliding fit on...

...Abstract (Equivalent): A sample holder is provided for an NMR spectrometer for microlitre range samples comprising a rotor with a central blind base with an internal thread over at least part of its length, a hollow sample tube accommodatable in the bore; a centring screw engageable with the thread of the rotor bore and having a central bore for holding the tube and centring it; and a sealing element which is a sliding fit on...

...Abstract (Equivalent): A sample holder for an NMR spectrometer for liquid samples in the microlitre range comprises...

...a rotor having a central blind bore with a internal thread for at least a portion of its length...

...hollow cylindrical sample tube having a closed end and an open end, and having an outer diameter of less than 3 mm, the diameter being such as to enable the sample...

...a centring screw having an external thread adapted to engage the said internal thread of the central rotor bore and a central bore adapted to accommodate the sample tube...

Title Terms: NMR ;

International Patent Class (Additional): G01N-024/08

24/3,K/5 (Item 5 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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008866131 **Image available**

WPI Acc No: 1991-370157/199151

XRPX Acc No: N91-283376

Sample head for nuclear magnetic resonance spectrometer - has coil arrangement with earth lead contg. capacitor

Patent Assignee: BRUKER ANALYTISCHE MESSTECHNIK (BRUK-N)

Inventor: ZEIGER H

Number of Countries: 002 Number of Patents: 003

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
DE 4018657	A	19911212	DE 4018657	A	19900611	199151 B
US 5180982	A	19930119	US 91710563	A	19910605	199306
DE 4018657	C2	19930415	DE 4018657	A	19900611	199315

NA TAP 5/12/2005

Priority Applications (No Type Date): DE 4018657 A 19900611

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 5180982	A		7	G01R-033/20	
DE 4018657	C2		6	G01R-033/30	

Sample head for nuclear magnetic resonance spectrometer -

...Abstract (Basic): When the coil arrangement has three coil portions ,
pref. one. lead is connected to the **outer** end of the first coil
portion and to the centre-point between the second and third coil
portions, while the other lead is connected to the **outer** end of the
third coil portion and to the centre-point between the first and...

...Abstract (Equivalent): The probehead for a nuclear **magnetic resonance
spectrometer** comprises a coil structure defining an axis and having
a first, a second, and a...

...fed from a common high-frequency source. Adjacent sub-coils are wound in
an opposite **winding** direction. A sample **holder** is arranged within
the centre of the middle sub-coil...

International Patent Class (Additional): G01N-024/08 ...

24/3,K/6 (Item 6 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2005 Thomson Derwent. All rts. reserv.

IV/A TAP 5/12/2005

008456821 **Image available**

WPI Acc No: 1990-343821/199046

**Pressure relief cover for cryostats for NMR spectrometer - having
easy introduction of locking device into tank opening, with catch having
noses engaging behind opening**

Patent Assignee: SPECTROSPIN AG (SPEC-N)

Inventor: MRAZ B

Number of Countries: 003 Number of Patents: 004

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
GB 2231381	A	19901114	GB 9010796	A	19900514	199046 B
DE 3915788	C	19901115	DE 3915788	A	19890513	199046
US 5094084	A	19920310	US 90521606	A	19900510	199213
GB 2231381	B	19930120	GB 9010796	A	19900514	199303

Priority Applications (No Type Date): DE 3915788 A 19890513

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 5094084	A		8		
GB 2231381	B			F16J-013/24	

Pressure relief cover for cryostats for NMR spectrometer -

...Abstract (Basic): additional nitrogen tank and a vacuum section, have a
pressure relief cover arranged at the **outside** of the tank wall of the

cryostat for closing an opening, such as are used to house the superconductive magnet coil of an **NMR spectrometer** . A locking device (7) is provided by which the pressure-relief cover (4) is **retained** in position on the tank wall (1) of the cryostat and which, in its closed position, urges the pressure-relief cover (4) against the **edge** (3) of the tank opening (2), under the action of a spring (18), such that...

...Abstract (Equivalent): The cryostat has an excess pressure cap (4) mounted on the **outside** of the container wall of the cryostat for sealing an orifice which links the cryostat...

...rigid connection of the tensioner to the pressure cap is provided via, e.g. a **threaded** or bolted joint etc. ADVANTAGE - High level of safety provided by excess pressure cap which...

...Abstract (Equivalent): additional nitrogen tank and a vacuum section, comprising a pressure-relief cover arranged at the **outside** of the tank wall of the cryostat for closing an opening therein, wherein a locking device (7) is provided by which the said pressure-relief cover (4) is **retained** in position on the tank wall (1) of the said cryostat and which, in its closed position, urges the said pressure-relief cover (4) against the **edge** (3) of the tank opening (2), under the action of a spring (18), in such...

...Abstract (Equivalent): a pressure-relief cover (4) sealing the tank wall opening (2) and mounted on the **outside** (5) of the tank wall (1). A locking device (7) comprises U-shaped guide (8)...

...Title Terms: **NMR** ;

24/3,K/7 (Item 7 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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003892705

WPI Acc No: 1984-038246/198407

XRPX Acc No: N84-029027

Selective activation system for trimming superconducting magnet - uses superconducting persistence switches in cryostat connected to decoding circuit

Patent Assignee: VARIAN ASSOC INC (VARI)

Inventor: ANDERSON M H; KNEIP G D; LEE R L

Number of Countries: 004 Number of Patents: 007

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
DE 3328369	A	19840209	DE 3328369	A	19830805	198407 B
GB 2125632	A	19840307	GB 8320089	A	19830726	198410
JP 59034604	A	19840225	JP 83128097	A	19830715	198414
US 4535291	A	19850813	US 82406418	A	19820809	198535
GB 2168852	A	19860625	GB 86163	A	19860106	198626
GB 2125632	B	19861203				198649
GB 2168852	B	19861231				198652

Priority Applications (No Type Date): US 82406418 A 19820809

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
DE 3328369	A		20		

...Abstract (Basic): There is a crystal which isolates a number of superconducting persistence switches (94) and which **holds** them at a suitable low temp. There are N switches, and there is a different number K of conductors to produce a connection between the **outside** of

N/A 5-12-2005 TAF

the crystal and its inside to activate the switches...

...a resistor (96). The system may be used to control the magnets of a Nuclear **Magnetic resonance spectrometer**. The system suffers minimal heat loss.

...Abstract (Equivalent): Pairs of magnet **windings** are excited concurrently, the coils being subjected to interaction via mutual inductance. This is achieved...

...coils is selected by addressing a diode array, the field currents to the respective magnet **windings** are separately supplied in a relative manner such that an additional load (or sink) as...

International Patent Class (Additional): **G01N-024/08** ...

?

N/A TAF 5/2/2005

10689660

35/3,K/1 (Item 1 from file: 2)

DIALOG(R)File 2:INSPEC

(c) 2005 Institution of Electrical Engineers. All rts. reserv.

8293514 INSPEC Abstract Number: A2005-07-0758-002, B2005-04-3240E-001,
C2005-04-3120F-010

Title: Design of support structure to suppress vibrations of the magnet vessel in the 900-MHz NMR cryostat

Author(s): Miller, J.R.; Miller, G.E.; Cantrell, K.R.; Toplosky, V.J.

Author Affiliation: Nat. High Magnetic Field Lab., Tallahassee, FL, USA

Journal: AIP Conference Proceedings Conference Title: AIP Conf. Proc.
(USA) no.710, pt.1 p.471-8

Publisher: AIP,

Publication Date: 2004 Country of Publication: USA

CODEN: APCPCS ISSN: 0094-243X

SICI: 0094-243X(2004)710:1L.471:DSSS;1-T

Material Identity Number: A210-2004-031

U.S. Copyright Clearance Center Code: 0-7354-0186-1/04/\$22.00

Conference Title: Advances in Cryogenic Engineering. Cryogenic Engineering Conference - CEC

Conference Sponsor: Argonne Nat. Lab.; Cryofab Inc.; Cryomagnetics Inc.; Cryomech Inc.; Fermi Nat. Accelerator Lab.; Oak Ridge Nat. Lab.; Sci. Instruments Inc.; U.S. Dept. of Energy

Conference Date: 22-26 Sept. 2003 Conference Location: Anchorage, AK, USA

Language: English

Subfile: A B C

Copyright 2005, IEE

Title: Design of support structure to suppress vibrations of the magnet vessel in the 900-MHz NMR cryostat

Abstract: In magnet systems like the NHMFL's 900-MHz NMR spectrometry magnet, parts-per-billion field quality is required. Since small movements of the magnet...

... the greatest practical degree. The cryostat for the 900-MHz magnet is equipped with an **external** damping system that greatly attenuates both vertical and horizontal vibrations greater than about 1 Hz...

... design, and the optimization of the heat intercepts for minimum impact on the cryostat's **hold** time.

...Descriptors: **NMR spectrometers** ;

...Identifiers: **NMR** cryostat...

...NHMFL **NMR** spectrometry magnet...

... **external** damping system...

...cryostat **hold** time

NA TAF 5-12-2005

35/3,K/2 (Item 2 from file: 2)

DIALOG(R)File 2:INSPEC

(c) 2005 Institution of Electrical Engineers. All rts. reserv.

5828851 INSPEC Abstract Number: A9806-0758-005, C9803-7320-110

Title: Miniature magnetic resonance spectrometers

Author(s): Soon Sam Rim; Mysoor, N.R.; Carnes, S.R.

Author Affiliation: Jet Propulsion Lab., California Inst. of Technol., Pasadena, CA, USA

Conference Title: 16th DASC. AIAA/IEEE Digital Avionics Systems
Conference. Reflections to the Future. Proceedings (Cat. No.97CH36116)
Part vol.1 p.2.2-14-23 vol.1

Publisher: IEEE, New York, NY, USA

Publication Date: 1997 Country of Publication: USA 2 vol.
(xvii+674+xi+582) pp.

ISBN: 0 7803 4150 3 Material Identity Number: XX97-02931

U.S. Copyright Clearance Center Code: 0 7803 4150 3/97/\$10.00

Conference Title: 16th DASC. AIAA/IEEE Digital Avionics Systems
Conference. Reflections to the Future. Proceedings

Conference Sponsor: Dept. Defense Open Syst. Joint Task Force; Hughes
Aircraft Co. Sensors & Commun. Syst.; McDonnell Douglas Aerosp. Transport
Aircraft

Conference Date: 26-30 Oct. 1997 Conference Location: Irvine, CA, USA

Language: English

Subfile: A C

Copyright 1998, IEE

Title: Miniature magnetic resonance spectrometers

...Abstract: such as chemical characterization of Martian surface
materials by miniature instruments, we have developed miniature **Magnetic
Resonance Spectrometers (MRS)** namely, Nuclear **Magnetic Resonance
(NMR)** and Electron Paramagnetic Resonance (EPR) **spectrometers** at JPL.
They are; Proton- **NMR spectrometer** for the detection of various forms of
water, i.e., free water or adsorbed water in soil or rock pores, or
chemically bound water in minerals; Iron- **NMR** (⁵⁷Fe-MMR) for the
characterization of magnetic phase minerals; EPR **spectrometer** for the
detection of oxidant radical species in the soil, oxidation states of
paramagnetic ions...

... g., carbonates, sulfates, by detection of color centers in solid or icy
matrices. For these **spectrometers**, resonance is observed by scanning
radio (**NMR**) or microwave (EPR) frequency at a fixed magnetic field
provided by a small permanent magnet assembly. Each of the **MRS** is
developed in two configurations; the conventional configuration with
samples placed inside the **MRS** (internal detection mode), and the other by
placing the **MRS** over a sample surface (**external** detection mode). The
external detection mode does not require complex sample **handling**
procedure and it is particularly suitable for selection of samples by a
rover for planned Mars sample return missions. The miniature **MRS** are
powered by 9 V batteries, and operated by a lap-top PC.

...Descriptors: EPR **spectrometers** ; ...

... **NMR spectrometers** ;

Identifiers: miniature **magnetic resonance spectrometers** ; ...

...Nuclear **Magnetic Resonance** ; ...

...proton- **NMR spectrometer** ;

35/3,K/3 (Item 3 from file: 2)

DIALOG(R)File 2:INSPEC

(c) 2005 Institution of Electrical Engineers. All rts. reserv.

5661331 INSPEC Abstract Number: A9718-0758-005

Title: The TRIUMF mu SR facility

Author(s): Arseneau, D.J.; Hitti, B.; Kreitzman, S.R.; Whidden, E.

Author Affiliation: TRIUMF, Vancouver, BC, Canada

Journal: Hyperfine Interactions Conference Title: Hyperfine Interact.

N/A TAF 5-12-2005

(Netherlands) vol.106, no.1-4 p.277-82
Publisher: Baltzer,
Publication Date: April 1997 Country of Publication: Netherlands
CODEN: HYINDN ISSN: 0304-3843
SICI: 0304-3843(199704)106:1/4L.277:TF;1-8
Material Identity Number: H042-97006
Conference Title: 7th International Conference on Muon Spin
Rotation/Relaxation/Resonance
Conference Date: 15-19 April 1996 Conference Location: Nikko, Japan
Language: English
Subfile: A
Copyright 1997, FIZ Karlsruhe

...Abstract: mu SR facility is described. An overview is given of beam
line characteristics, mu SR **spectrometers**, experimental "inserts" and how
they combine for various experiments. Some of the recent installations and
...

... the TRIUMF facility will be further highlighted. These include low
background cryostat inserts, newly-planned **spectrometers**, and the
possibility of an additional beam line. The CAMP slow-controls system for
monitoring and controlling **peripheral** devices is outlined.

Descriptors: beam **handling** techniques...

NA TAF 5-12-2005

... **magnetic resonance spectrometers** ;
...Identifiers: mu SR **spectrometers** ;

35/3,K/4 (Item 4 from file: 2)
DIALOG(R)File 2:INSPEC
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5327715 INSPEC Abstract Number: A9617-8760I-011, B9609-7510B-029,
C9609-7330-032

**Title: Modification of a whole-body NMR imager into a radio frequency
EPR spectrometer suitable for in vivo measurements**

Author(s): McCallum, S.J.; Alecci, M.; Lurie, D.J.

Author Affiliation: Dept. of Biomed. Phys. & Bioeng., Aberdeen Univ., UK

Journal: Measurement Science & Technology vol.7, no.7 p.1012-18

Publisher: IOP Publishing,

Publication Date: July 1996 Country of Publication: UK

CODEN: MSTCEP ISSN: 0957-0233

SICI: 0957-0233(199607)7:7L.1012:MWBI;1-M

Material Identity Number: N647-96007

U.S. Copyright Clearance Center Code: 0957-0233/96/071012+07\$19.50

Language: English

Subfile: A B C

Copyright 1996, IEE

**Title: Modification of a whole-body NMR imager into a radio frequency
EPR spectrometer suitable for in vivo measurements**

Abstract: We report the modification of a low-field whole-body NMR
imager to allow radio frequency EPR spectroscopy. The instrument is
designed to give optimum sensitivity...

... able to operate over a wide frequency range (240-320 MHz) and is
designed to **handle** input power levels of up to 12.5 W. The EPR resonator
is of the...

...Descriptors: biomedical **NMR** ; ...

...EPR **spectrometers** ; ...

... **peripheral** interfaces

Identifiers: low-field whole-body **NMR** imager...

...radio frequency EPR **spectrometer** ;

NA 5-12-2005

35/3,K/5 (Item 5 from file: 2)

DIALOG(R)File 2:INSPEC

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03734487 INSPEC Abstract Number: A90137548, B90072744

Title: On the use of a gradient resonance neutron spin flipper

Author(s): Faber, W.; Bader, B.; Heitjans, P.; Schirmer, A.

Author Affiliation: Inst. fur Phys. Chem. & Elektrochem., Hannover Univ., West Germany

Journal: Nuclear Instruments & Methods in Physics Research, Section A (Accelerators, Spectrometers, Detectors and Associated Equipment)
vol.A294, no.1-2 p.241-4

Publication Date: 1 Sept. 1990 Country of Publication: Netherlands

CODEN: NIMAER ISSN: 0168-9002

U.S. Copyright Clearance Center Code: 0168-9002/90/\$03.50

Language: English

Subfile: A B

NA 5-12-2005

...Abstract: the spin flip probability are reported. The device is part of an in-beam beta - **NMR spectrometer** , working in the **external** neutron guide laboratory at the research reactor FRJ-2, KFA-Julich.

Descriptors: beam **handling** equipment

...Identifiers: in-beam beta - **NMR spectrometer** ;

35/3,K/6 (Item 6 from file: 2)

DIALOG(R)File 2:INSPEC

(c) 2005 Institution of Electrical Engineers. All rts. reserv.

03620270 INSPEC Abstract Number: C90036136

Title: A data acquisition system developed around an IBM Compatible PC

Author(s): Puvvada, R.; Escid, H.

Author Affiliation: Dept. d'Electron., Ecole Nat. Polytech., Algiers, Algeria

Journal: AMSE Review vol.12, no.1 p.1-9

Publication Date: 1989 Country of Publication: France

CODEN: AMRVEY ISSN: 0761-2486

Language: English

Subfile: C

...Abstract: developed for an IBM compatible PC is presented. This card, consisting of a sample and **hold** circuit, an analogue to digital converter, a **peripheral** interface adaptor and address decoding logic, goes into the standard IBM expansion slot of the...

... microprocessor has been chosen for this purpose. This system has been used with a nuclear **magnetic resonance** pulse **spectrometer** for data acquisition. An assembler code program for data acquisition is also presented.

...Descriptors: nuclear **magnetic resonance** spectroscopy

...Identifiers: sample and **hold** circuit...

... peripheral interface adaptor...

...nuclear magnetic resonance pulse spectrometer ;

35/3,K/7 (Item 7 from file: 2)

DIALOG(R)File 2:INSPEC

(c) 2005 Institution of Electrical Engineers. All rts. reserv.

00323438 INSPEC Abstract Number: A71075037, C71024008

Title: Computer controlled Fourier transform nuclear magnetic resonance system for carbon-13 and phosphorus-31 spectrometry

Author(s): Cushley, R.J.; Anderson, D.R.; Lipsky, S.R.

Author Affiliation: Yale Univ. School Medicine, New Haven, CT, USA

Journal: Analytical Chemistry vol.43, no.10 p.1281-7

Publication Date: Aug. 1971 Country of Publication: USA

CODEN: ANCHAM ISSN: 0003-2700

Language: English

Subfile: A C

Title: Computer controlled Fourier transform nuclear magnetic resonance system for carbon-13 and phosphorus-31 spectrometry

Abstract: A high resolution **NMR spectrometer** has been modified for pulse-Fourier spectrometry. Data acquisition and data **handling** are accomplished by means of an IBM 1800 computer with 24K of 4 mu sec core storage and numerous **peripheral** devices. The **NMR** free induction decay signal (up to 8192 data points) can be digitized at rates up...

...Descriptors: nuclear **magnetic resonance** ;

Identifiers: computer controlled Fourier transform **NMR** system...

35/3,K/8 (Item 1 from file: 155)

DIALOG(R)File 155:MEDLINE(R)

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07539349 PMID: 3699021

31P- NMR investigation of magnetically oriented rod outer segments. Spectral analysis and identification of individual phospholipids.

Mollevanger L C; Dratz E A; De Kruijff B; Hilbers C W; De Grip W J

European journal of biochemistry / FEBS (GERMANY, WEST) Apr 15 1986, 156 (2) p383-90, ISSN 0014-2956 Journal Code: 0107600

Publishing Model Print

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: MEDLINE; Completed

31P- NMR investigation of magnetically oriented rod outer segments. Spectral analysis and identification of individual phospholipids.

A 31P- **NMR** study of magnetically oriented bovine rod **outer** segments is presented. We demonstrate that carefully isolated bovine rod **outer** segments **retain** the capacity to orient in a magnetic field. Maximal orientation (85-90%) is achieved at field strengths over 4.7 T in the **NMR spectrometer**. The lineshape of the 'oriented spectra' is totally different from the 'bilayer lineshape' of randomly...

...classes phosphatidylserine, phosphatidylcholine and phosphatidylethanolamine. Based on the morphology and magnetic anisotropy of the rod **outer** segment, the major phospholipid peak is attributed to the flat part of the disk membranes...

N/A 5-12-2005

N/A 5-12-2005

... is estimated by spectral simulation and is consistent with the phospholipid class composition of rod **outer** segment membranes. Hence, ³¹P analysis of oriented rod **outer** segments resolves the main phospholipids in at least two different membrane pools in the rod **outer** segment and allows the differential investigation of these pools. Most of the mobile phosphate metabolite...

N/A
5-12-2005
TAF

Descriptors: *Phospholipids--analysis--AN; *Photoreceptors--analysis--AN; *Rod **Outer** Segments--analysis--AN; Animals; Cattle; **Magnetic Resonance Spectroscopy**; Membrane Lipids--analysis--AN; Phosphorus; Rod **Outer** Segments--ultrastructure--UL

35/3,K/9 (Item 1 from file: 5)
DIALOG(R)File 5:BIOSIS Previews(R)
(c) 2005 BIOSIS. All rts. reserv.

0013756342 BIOSIS NO.: 200200349853

Cell wall changes in ripening kiwifruit: ¹³C solid state NMR characterisation of relatively rigid cell wall polymers

AUTHOR: Newman R H; Redgwell R J (Reprint)

AUTHOR ADDRESS: Nestle Research Center, Nestec Ltd., Vers-Chez-Les-Blanc, CH-1000, Lausanne, 26, Switzerland**Switzerland

JOURNAL: Carbohydrate Polymers 49 (2): p121-129 1 August, 2002 2002

MEDIUM: print

ISSN: 0144-8617

DOCUMENT TYPE: Article

RECORD TYPE: Abstract

LANGUAGE: English

N/A 5/12/2005
Ex. TAF

Cell wall changes in ripening kiwifruit: ¹³C solid state NMR characterisation of relatively rigid cell wall polymers

ABSTRACT: Cell wall material was isolated from the **outer** pericarp of kiwifruit at harvest and at several ripening stages following a postharvest ethylene treatment. Solid state ¹³C **NMR** spectra showed no evidence for changes in the nature of the cellulose crystallites or the

...

...fruits in which cell wall dissolution was extreme. Nuclear spin relaxation experiments showed that pectin **retained** in the cell wall became 'softened' in the early stages of ripening, prior to solubilisation...

...amount of non-cellulosic matter that remained sufficiently rigid to respond to the cross-polarisation **NMR** pulse sequence. The results support the idea that pectin solubilisation in ripening fruit may in...

DESCRIPTORS:

METHODS & EQUIPMENT: Varian Inova 200 **spectrometer** --...

...carbon-13 solid state **NMR** spectroscopy

35/3,K/10 (Item 2 from file: 5)
DIALOG(R)File 5:BIOSIS Previews(R)
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0013675448 BIOSIS NO.: 200200268959

Photomodulation of conformational states. III. Water-soluble

bis-cysteiny-peptides with (4-aminomethyl)phenylazobenzoic acid as backbone constituent

AUTHOR: Renner Christian; Behrendt Raymond; Heim Nicola; Moroder Luis

(Reprint)
AUTHOR ADDRESS: Max-Planck-Institut fuer Biochemie, Am Klopferspitz 18A,
D-82152, Martinsried, Germany**Germany
JOURNAL: Biopolymers 63 (6): p382-393 May, 2002 2002
MEDIUM: print
ISSN: 0006-3525
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

...ABSTRACT: this purpose water-soluble systems are required, and this was achieved by replacing three residues **outside** the Cys-Ala-Thr-Cys active-site motif of thioredoxin reductase with lysines. The resulting cyclo-(Lys-Cys-Ala-Thr-Cys-Asp-Lys-Lys-AMPB) fully **retains** its photoresponsive properties in water as well assessed by uv and CD measurements. Paralleling results...

NA 5-12-05

DESCRIPTORS:

METHODS & EQUIPMENT: Bruker DRX 500 **spectrometer** --...

Ex. TAF

... **NMR** spectroscopy

35/3,K/11 (Item 3 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
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0012522914 BIOSIS NO.: 200000241227

15N and 1H NMR study of histidine containing protein (HPr) from Staphylococcus carnosus at high pressure

AUTHOR: Kalbitzer Hans Robert (Reprint); Goerler Adrian; Li Hua; Dubovskii Peter V; Hengstenberg Wolfgang; Kowolik Claudia; Yamada Hiroaki; Akasaka Kazuyuki

AUTHOR ADDRESS: Institut fuer Biophysik und physikalische Biochemie, Universitaet Regensburg, D-93040, Regensburg, Germany**Germany

JOURNAL: Protein Science 9 (4): p693-703 April, 2000 2000

MEDIUM: print

ISSN: 0961-8368

DOCUMENT TYPE: Article

RECORD TYPE: Abstract

LANGUAGE: English

15N and 1H NMR study of histidine containing protein (HPr) from Staphylococcus carnosus at high pressure

...ABSTRACT: changes in 15N enriched HPr from Staphylococcus carnosus were investigated by two-dimensional (2D) heteronuclear **NMR** spectroscopy at pressures ranging from atmospheric pressure up to 200 MPa. The **NMR** experiments allowed the simultaneous observation of the backbone and side-chain amide protons and nitrogens...

...coefficient. It could represent some kind of anchoring point of the active center loop that **holds** it in the right place in space, whereas other parts of the loop adapt themselves to changing **external** conditions.

DESCRIPTORS:

METHODS & EQUIPMENT: Bruker DMX-750 **spectrometer** --...

...nitrogen-15 **NMR** spectroscopy...

...proton **NMR** spectroscopy...

N/A TAF 5-12-2005

...two-dimensional heteronuclear **NMR** spectroscopy

35/3,K/12 (Item 4 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
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0005193123 BIOSIS NO.: 198682039510
**PHOSPHORUS-31 NMR INVESTIGATION OF MAGNETICALLY ORIENTED ROD OUTER
SEGMENTS SPECTRAL ANALYSIS AND IDENTIFICATION OF INDIVIDUAL PHOSPHOLIPIDS**
AUTHOR: MOLLEVANGER L C P J (Reprint); DRATZ E A; DE KRUIJFF B; HILBERS C W
; DE GRIP W J
AUTHOR ADDRESS: AFDELING BIOCHEMIE, UNIVERSITEIT NIJMEGEN, PO BOX 9101,
NL-6500-HB NIJMEGEN, THE NETHERLANDS**NETHERLANDS
JOURNAL: European Journal of Biochemistry 156 (2): p383-390 1986
ISSN: 0014-2956
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: ENGLISH

**PHOSPHORUS-31 NMR INVESTIGATION OF MAGNETICALLY ORIENTED ROD OUTER
SEGMENTS SPECTRAL ANALYSIS AND IDENTIFICATION OF INDIVIDUAL PHOSPHOLIPIDS**

ABSTRACT: A **31P- NMR** study of magnetically oriented bovine rod **outer** segments is presented. We demonstrate that carefully isolated bovine rod **outer** segments **retain** the capacity to orient in a magnetic field. Maximal orientation (85-90%) is achieved at field strengths over 4.7 T in the **NMR spectrometer**. The lineshape of the 'oriented spectra' is totally different from the 'bilayer lineshape' of randomly...

...classes phosphatidylserine, phosphatidylcholine and phosphatidylethanolamine. Based on the morphology and magnetic anisotropy of the rod **outer** segment, the major phospholipid peak is attributed to the flat part of the disk membranes...

...is estimated by spectral simulation and is consistent with the phospholipid class composition of rod **outer** segment membranes. Hence, **31P** analysis of oriented rod **outer** segments resolves the main phospholipids in at least two different membrane pools in the rod **outer** segment and allows the differential investigation of these pools. Most of the mobile phosphate metabolite...

35/3,K/13 (Item 1 from file: 6)
DIALOG(R)File 6:NTIS
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1058055 NTIS Accession Number: DE83013295
SPEC-DOC: A User's Guide to Spectrometer Software
Sinton, S. ; Garbow, J. R. ; Ackerman, J. L. ; Drobny, G. ; Ruben, D. J.
California Univ., Berkeley. Lawrence Berkeley Lab.
Corp. Source Codes: 005029222; 9513034
Sponsor: Department of Energy, Washington, DC.
Report No.: LBL-PUB-3033
May 83 128p
Languages: English
Journal Announcement: GRAI8324; NSA0800
Order this product from NTIS by: phone at 1-800-553-NTIS (U.S. customers); (703)605-6000 (other countries); fax at (703)321-8547; and

email at orders@ntis.fedworld.gov. NTIS is located at 5285 Port Royal Road, Springfield, VA, 22161, USA.

NTIS Prices: PC A07/MF A01

SPEC-DOC: A User's Guide to Spectrometer Software

SPEC is the name of the operating system designed to control **NMR spectrometers**. SPEC is actually one large program which **handles** many functions necessary to control each **spectrometer**. The SPEC operating system is documented. The general operation of SPEC is discussed, including how...

... are discussed in detail, as well as the operation of the microprocessor based pulse programmer, **spectrometer peripherals**, supporting programs, and how to create and load a TEMP program. Appended are details on...

Descriptors: *Computer Codes; * **NMR Spectrometers**; S Codes; Magnetic Disks; Pulse Circuits

35/3,K/14 (Item 1 from file: 8)

DIALOG(R)File 8: Ei Compendex(R)

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04915618 E.I. No: EIP98014025103

Title: Miniature magnetic resonance spectrometers

Author: Kim, Soon Sam; Mysoor, Narayan R.; Carnes, Steven R.; Ulmer, Christopher T.

Corporate Source: California Inst of Technology, Pasadena, CA, USA

Conference Title: Proceedings of the 1997 16th AIAA/IEEE Digital Avionics Systems, DASC. Part 1 (of 2)

Conference Location: Irvine, CA, USA Conference Date: 19971026-19971030

E.I. Conference No.: 47610

Source: AIAA/IEEE Digital Avionics Systems Conference - Proceedings v 1 1997. IEEE, Piscataway, NJ, USA, 97CB36116. p 2.2-14-2.2-23

Publication Year: 1997

CODEN: ADACFY

Language: English

Title: Miniature magnetic resonance spectrometers

...Abstract: such as chemical characterization of Martian surface materials by miniature instruments, we have developed miniature **Magnetic Resonance Spectrometers (MRS)** namely, Nuclear **Magnetic Resonance (NMR)** and Electron Paramagnetic Resonance (EPR) **spectrometers** at JPL. They are; Proton- **NMR spectrometer** for the detection of various forms of water, i.e., free water or adsorbed water in soil or rock pores, or chemically bound water in minerals; Iron- **NMR (**5**7Fe- NMR)** for the characterization of magnetic phase minerals; EPR **spectrometer** for the detection of oxidant radical species in the soil, oxidation states of paramagnetic ions...

...g., carbonates, sulfates, by detection of color centers in solid or icy matrices. For these **spectrometers**, resonance is observed by scanning radio (**NMR**) or microwave (EPR) frequency at a fixed magnetic field provided by a small permanent magnet assembly. Each of the **MRS** is developed in two configurations; the conventional configuration with samples placed inside the **MRS** (internal detection mode), and the other by placing the **MRS** over a sample surface (**external** detection mode). The **external** detection mode does not require complex sample **handling** procedure and it is particularly suitable for selection of samples by a rover for planned Mars sample return missions. The miniature **MRS** are powered by 9 V batteries, and operated by a lap-top PC. (Author abstract...

Descriptors: ***Magnetic resonance spectrometers** ; Miniature instruments; Interplanetary flight; Personal computers
Identifiers: Internal detection mode; **External** detection mode

NA TR 5-12-2005

35/3,K/15 (Item 2 from file: 8)
DIALOG(R)File 8: Ei Compendex(R)
(c) 2005 Elsevier Eng. Info. Inc. All rts. reserv.

02913192 E.I. Monthly No: EI9006065096
Title: Data acquisition system developed around an IBM compatible PC.
Author: Puvvada, Ramesh; Escid, Hammoudi
Corporate Source: Ecole Natl Polytechnique, Algiers, Algeria
Source: AMSE Review (Association for the Advancement of Modelling and Simulation Techniques in Enterprises) v 12 n 1 1989 p 1-9
Publication Year: 1989
CODEN: AMRVEY ISSN: 0761-2486
Language: English

NA TR
5-12-2005

...Abstract: developed for an IBM compatible PC is presented. This card, consisting of a sample and **hold** circuit, an analogue to digital converter, a **peripheral** interface adaptor and the address decoding logic, goes into the standard IBM expansion slot of...

...microprocessor has been chosen for this purpose. This system has been used with a Nuclear **Magnetic Resonance** pulse **spectrometer** for data acquisition. An assembler code program for data acquisition is also presented. (Author abstract...)

...Descriptors: Data Acquisition; **SPECTROMETERS , MAGNETIC RESONANCE**
--...

...Computer Aided Diagnosis; **NUCLEAR MAGNETIC RESONANCE**
Identifiers: IBM COMPATIBLE PC; DATA ACQUISITION CARD; **NMR PULSE SPECTROMETER** ; ASSEMBLER CODE PROGRAM

35/3,K/16 (Item 3 from file: 8)
DIALOG(R)File 8: Ei Compendex(R)
(c) 2005 Elsevier Eng. Info. Inc. All rts. reserv.

02744245 E.I. Monthly No: EI8906055634
Title: Sensor for NMR spectrometer for study of photochemical processes.
Author: Skakovskii, E. D.
Corporate Source: Acad of Sciences of the BSSR, Minsk, USSR
Source: Instruments and Experimental Techniques (English Translation of Pribery I Tekhnika Eksperimenta) v 31 n 1 pt 2 Aug 1988 p 158-160
Publication Year: 1988
CODEN: INETAK ISSN: 0020-4412
Language: English

Title: Sensor for NMR spectrometer for study of photochemical processes.

Abstract: The pickup coil of the sensor is located on the **outside** of a fixed ampule at an angle to the vertical axis of 35-40** degree...

Descriptors: ***SPECTROMETER S, MAGNETIC RESONANCE** --*...

...Photochemical Reactions; LIGHT SOURCES; FIBER OPTICS; **NUCLEAR MAGNETIC RESONANCE** --

Identifiers: ETHANOL **NMR SPECTRA**; HYDROGEN 1 **NMR SPECTRA**; REFLECTIVE

N/A TAF 5-12-2005

SHIELDS; SAMPLE **HOLDERS** ; SENSOR PICKUP COILS; SOLUTION STIRRING

35/3,K/17 (Item 4 from file: 8)
DIALOG(R)File 8: Ei Compendex(R)
(c) 2005 Elsevier Eng. Info. Inc. All rts. reserv.

02551570 E.I. Monthly No: EIM8803-013835

Title: CHEMISTRY OF INTERNAL COMBUSTION ENGINE DEPOSITS - III. **13C NUCLEAR MAGNETIC RESONANCE EMPLOYING **1H CROSS-POLARIZATION AND MAGIC ANGLE SPINNING.**

Author: Ebert, Lawrence B.; Rose, Kenneth D.; Melchior, Michael T.
Corporate Source: Exxon Research & Engineering, Co Linden, NJ, USA
Conference Title: Chemistry of Engine Combustion Deposits. (Held at the 181st American Chemical Society National Meeting.)
Conference Location: Atlanta, GA, USA Conference Date: 19810330
E.I. Conference No.: 10783
Source: Publ by Plenum Press, New York, NY, USA p 119-144
Publication Year: 1985
ISBN: 0-306-41936-X
Language: English

N/A TAF 5-12-2005

Title: CHEMISTRY OF INTERNAL COMBUSTION ENGINE DEPOSITS - III. **13C NUCLEAR MAGNETIC RESONANCE EMPLOYING **1H CROSS-POLARIZATION AND MAGIC ANGLE SPINNING.**

Abstract: An attempt is made to answer this question: What kind of carbon **holds** the backbone of the deposit matrix together? To answer this, we have performed experiments to investigate the ****1**3C nuclear magnetic resonance** of solid state deposits, using the technique of cross polarization/magic angle spinning (CP/MAS...

...aromatic carbons not bound to protons (either internal carbons of extended benzenoid networks or substituted **peripheral** carbons). 18 refs.

...Descriptors: Deposits; NUCLEAR **MAGNETIC RESONANCE** ; AROMATIC COMPOUNDS; MICROANALYSIS

Identifiers: CROSS POLARIZATION/MAGIC ANGLE SPINNING (CP/MAS); JEOL FX-60QS SOLID-STATE **SPECTROMETER**

35/3,K/18 (Item 1 from file: 347)
DIALOG(R)File 347: JAPIO
(c) 2005 JPO & JAPIO. All rts. reserv.

06443126 **Image available**
DILUTION REFRIGERATOR FOR NUCLEAR **MAGNETIC RESONANCE SPECTROMETER**

PUB. NO.: 2000-028696 [JP 2000028696 A]
PUBLISHED: January 28, 2000 (20000128)
INVENTOR(s): KAMIOKA YASU HARU
UMENO TAKAHIRO
APPLICANT(s): TAIYO TOYO SANSO CO LTD
APPL. NO.: 10-214892 [JP 98214892]
FILED: July 14, 1998 (19980714)

DILUTION REFRIGERATOR FOR NUCLEAR **MAGNETIC RESONANCE SPECTROMETER**

ABSTRACT

... TO BE SOLVED: To obtain a dilution refrigerator, in which a sample used for nuclear **magnetic resonance** (**NMR**) analysis is cooled and held, in which a resonance circuit is built, which uses a...

N/A THF 5-D-2005

... be capable of tuning the resonance circuit which restrains heat from leaking in from the **outside** and whose **outside** diameter is reduced as a whole.

SOLUTION: A hollow support tube 22 is inserted vertically...

... lower side of the plunger 24 is used also as a sample chamber and concurrently **holds** a resonance circuit coil and a sample. The variable capacitor of the resonance circuit is...

35/3,K/19 (Item 1 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2005 Thomson Derwent. All rts. reserv.

016580579 **Image available**

WPI Acc No: 2004-739314/200473

XRAM Acc No: C04-260048

XRPX Acc No: N04-585059

Detecting prohibited materials, e.g., for explosives and narcotics in cargoes, comprises sampling air from an enclosure containing the cargo and detecting solid particles retained on a filter

Patent Assignee: ICTS FRANCE SA (ICTS-N); BAR Y A (BARY-I); ELDAR Z (ELDA-I); SAPIR O (SAPI-I)

Inventor: BAR Y A; ELDAR Z; SAPIR O

Number of Countries: 002 Number of Patents: 002

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
FR 2853729	A1	20041015	FR 20034330	A	20030408	200473 B
US 20040202574	A1	20041014	US 2003677225	A	20031003	200473

Priority Applications (No Type Date): FR 20034330 A 20030408

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
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FR 2853729	A1	24	G01N-033/00		
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US 20040202574	A1		G01N-033/00		
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... in cargoes, comprises sampling air from an enclosure containing the cargo and detecting solid particles retained on a filter

Abstract (Basic):

Technology Focus:

... container for temporary storage of the filter; (b) a device consisting of several carriers for **holding** (30) that have been used in different tests; and (c) an analyzer for detecting particles **retained** on (30), e.g. a gas chromatograph; nuclear **magnetic resonance** instrument (particularly for 13-carbon analysis) or a mass **spectrometer**. The pore or mesh size of (30) may be selected to trap particles of a particular material and (30) consists of an **external**, tubular enclosure containing the filter element (34), optionally supported on a central element. (34) may...

...Title Terms: **RETAIN** ;

35/3,K/20 (Item 2 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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011331205 **Image available**

WPI Acc No: 1997-309109/199728

XRPX Acc No: N97-256167

N/A 5-12-2005

Temperature stabiliser and regulator for spectroscopy - has electrical heating element inside ampoule surrounded by thermal insulator

Patent Assignee: AS SIBE CATALYSIS INST (ASIT)

Inventor: MAKARSHIN L L; PARMON V N

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
RU 2069354	C1	19961120	RU 933035	A	19930118	199728 B

Priority Applications (No Type Date): RU 933035 A 19930118

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
RU 2069354	C1	4	G01N-024/00	

N/A TAF
5-12-2005

...Abstract (Basic): glass ampoule 5-6mm in diameter and 300mm long containing foam plastic cylinder (2) whose **external** diameter is 4.5mm, internal diameter 2.5mm and height 16mm. This contains heating element...

...and are soldered 3cm from the foam plastic to prevent parasitic losses in an EPR **spectrometer**. The tested sample is soldered into 2mm diameter glass ampoule (5) and fixed via rubber coupling (7) to **holder** (6), which is linked to rubber plug (8). Sample temperature accuracy was 0.3K, which...

...USE - Stabiliser-regulator concerns devices used for thermostating samples in EPR spectroscopy, **NMR** spectroscopy, UV-VIS and IR spectroscopy, including pulse methods, EXAFS spectroscopy and NGR spectroscopy to...

35/3,K/21 (Item 3 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2005 Thomson Derwent. All rts. reserv.

009611549 **Image available**

WPI Acc No: 1993-305097/199339

Related WPI Acc No: 1991-001490; 1992-318433; 1992-425840; 1993-305096; 1994-027934; 1994-027936; 1994-034445; 1994-085293; 1994-287335; 1994-302352; 1994-366232; 1995-024371; 1995-024372; 1996-019257; 2001-113942

XRFX Acc No: N93-234699

Superconducting magnet assembly for magnetic resonance imaging appts. - includes superconducting gradient shield coil assembly for creating shielding magnetic fields that inhibit gradient field from inducing eddy currents

Patent Assignee: MARCONI MEDICAL SYSTEMS INC (MAON); PICKER INT INC (PXR)

Inventor: DEMEESTER G D; MORICH M A; PATRICK J L

Number of Countries: 005 Number of Patents: 004

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 562708	A1	19930929	EP 93300595	A	19930127	199339 B
US 5289128	A	19940222	US 92859152	A	19920327	199408
EP 562708	B1	20030514	EP 93300595	A	19930127	200333
DE 69332969	E	20030618	DE 632969	A	19930127	200348
			EP 93300595	A	19930127	

Priority Applications (No Type Date): US 92859152 A 19920327

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
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EP 562708 A1 E 9 G01R-033/38
Designated States (Regional): DE FR GB NL
US 5289128 A 9 G01R-033/20
EP 562708 B1 E G01R-033/38
Designated States (Regional): DE FR GB NL
DE 69332969 E G01R-033/38 Based on patent EP 562708

N/A THE 5-4-2005

Superconducting magnet assembly for magnetic resonance imaging appts

...

...Abstract (Basic): disposed within the vacuum vessel. A low temperature reservoir (60) surrounding the superconducting magnet (56) **holds** a medium for **holding** the magnet below its superconducting temp...

...USE/ADVANTAGE - Eg for **NMR spectrometer** . Maximises bore in magnet assembly with minimised diameter...

...Abstract (Equivalent): region. The superconducting magnet includes a hollow, cylindrical vacuum vessel (40). An annular, liquid helium **holding** low temperature reservoir (60) extends centrally through the vacuum vessel, but is sealed therefrom such...

...reservoir. A main magnetic field shield coil (66) is disposed in the low temperature reservoir **outside** of the annular superconducting magnets for cancelling the magnetic field generated by the annular magnets...

...Manual Codes (EPI/S-X): **S03-E07A**

35/3,K/22 (Item 4 from file: 350)

DIALOG(R)File 350:Derwent WPIX
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009483305

WPI Acc No: 1993-176840/199322

XRAM Acc No: C93-078900

XRPX Acc No: N93-135520

Proton NMR spectrometer - comprises probe contg. variable capacitor filled with fluorinated dielectric oil

Patent Assignee: VARIAN ASSOC INC (VARI)

Inventor: BEHBIN A

Number of Countries: 002 Number of Patents: 002

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
DE 4239041	A1	19930527	DE 4239041	A	19921120	199322 B
US 5237274	A	19930817	US 91796282	A	19911122	199334

Priority Applications (No Type Date): US 91796282 A 19911122

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 5237274	A		7	G01R-033/20	
DE 4239041	A1			G01N-024/08	

Proton NMR spectrometer -

...Abstract (Basic): An **NMR spectrometer** has an intense magnetic field opening for receiving a probe, an h.f. transmitter/receiver connected to the probe, coils in the probe for exciting and maintaining **NMR** signals in a sample in the probe and a device for rotating a sample tube **holding** the sample in the probe. The coils are transmitting/receiving and decoupling coils, at least...

N/A TAF 5-12-2005

...Also claimed are processes for (a) turning an **NMR** probe to resonance,
(b) selection of a high performance probe for an **NMR** experiment and
(c) use of a fluorinated dielectric oil, e.g, 'Krytox' (RTM...
...Abstract (Equivalent): Tuning a nuclear **magnetic resonance** probe to
proton resonance, uses variable capacitors composed of two
electrostatically coupled metal cups (50,51), pref. of Ag, with the
central cup axially movable w.r.t. the **outer** cup. The entire region
(54) inside the capacitor is filled and sealed with high dielectric...
...Title Terms: **NMR** ;
International Patent Class (Main): **G01N-024/08** ...

35/3,K/23 (Item 5 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2005 Thomson Derwent. All rts. reserv.

007811918
WPI Acc No: 1989-077030/198910
XRPX Acc No: N89-058752

**Spinner appts for NMR spectrometer - rotates sample under study using
tube torque devices with gas jet sources to rotate rotor in opposite
directions**

Patent Assignee: VARIAN ASSOC INC (VARI)
Inventor: SCHULKE G F
Number of Countries: 005 Number of Patents: 004
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 4806868	A	19890221	US 87120574	A	19871113	198910
EP 318165	A	19890531	EP 88310272	A	19881101	198922
EP 318165	B	19910807				199132
DE 3864125	G	19910912				199138

B N/A 5-12-2005

Ex. TAF

Priority Applications (No Type Date): US 87120574 A 19871113

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
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US 4806868	A		4		
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EP 318165	A	E			
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Designated States (Regional): CH DE GB LI

EP 318165	B				
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Designated States (Regional): CH DE GB LI

Spinner appts for NMR spectrometer -

...Abstract (Basic): The **NMR** spinner apparatus has a rotor for **holding**
a sample and a stator surrounding rotor, stator forming a gas bearing
in which the...

...least one gas jet disposed to direct a stream of pressurized gas
tangential to the **periphery** of the rotor. The rotor is caused to
rotate in a first sense. A second...

...Abstract (Equivalent): Spinner apparatus for rotating a sample under
study in an **NMR spectrometer**, comprising a rotor (10) for **holding**
said sample, a stator (15) surrounding said rotor, said stator forming
a gas bearing in...

...Title Terms: **NMR** ;

35/3,K/24 (Item 6 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2005 Thomson Derwent. All rts. reserv.

No Sprinkles fibres
No gaps external gear in Sample Brushes.
TAF 5-12-2005 Cited

004609466

WPI Acc No: 1986-112810/198617

XRPX Acc No: N86-083193

**Sample selecting, placing and retrieving appts. for NMR spectrometer
- selects and positions for analysis in polarising field of spectrometer
one of test-tube-like sample holders at increased rate**

Patent Assignee: GENERAL ELECTRIC CO (GENE)

Inventor: VANVLIET R D

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 4581583	A	19860408				198617 B

Priority Applications (No Type Date): US 84584568 A 19840229

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
US 4581583	A	15		

**Sample selecting, placing and retrieving appts. for NMR spectrometer
- ...**

**...selects and positions for analysis in polarising field of spectrometer
one of test-tube-like sample holders at increased rate**

...Abstract (Basic): The sample selecting, positioning and retrieving appts. embodies a carousel having preferably inner and **outer** concentric rows of cylindrical tubes placed vertically between parallel upper and lower carousel plates. Each vertical tube is equipped with a **retaining** catch to maintain a sample in its resting position until it is released into a probe situated in a polarising magnetic field and, conversely to **hold** it in the rest position after it has been returned from the probe. A detent...

...Title Terms: **NMR** ;

35/3,K/25 (Item 7 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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NA TAF 5-12-2005

004125282

WPI Acc No: 1984-270823/198444

XRPX Acc No: N84-202053

**Magnetic vol. susceptibility measuring sample holder - is for nuclear
magnetic resonance spectrometer with rotation about axis of symmetry**

Patent Assignee: HENTSCHEL M (HENT-I)

Inventor: BOROSKE E; HOFFKEN W

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
DE 3314926	A	19841025	DE 3314926	A	19830422	198444 B

Priority Applications (No Type Date): DE 3314926 A 19830422

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
DE 3314926	A	16		

Magnetic vol. susceptibility measuring sample holder - ...

**...is for nuclear magnetic resonance spectrometer with rotation about
axis of symmetry**

...Abstract (Basic): The sample **holder** is in the form of a concentric hollow cylinder or a toroid. The **holder** is rotated about its axis of rotational symmetry to eliminate the residual in homogeneity of the **external** magnetic field in the first order from the nuclear **magnetic resonance** measuring signal...

...The sample **holder** is made of a material which exhibits nuclear spin resonance, with the dia. magnetic or...

...the opening in the torus. The axis of rotational symmetry is arranged perpendicular to the **external** magnetic field, with the sample **holder** rotated about this axis at a constant frequency...

...Title Terms: **HOLD** ;

35/3,K/26 (Item 8 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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IVA TAF 5-6-2005

003665630

WPI Acc No: 1983-25604K/198311

XRAM Acc No: C83-025054

XRPX Acc No: N83-046491

NMR spectrometer **sample spinner** - having end support and positioning
thrust gas bearings for rotor in stator chamber

Patent Assignee: MONSANTO CO (MONS)

Inventor: STEJSKAL E O

Number of Countries: 007 Number of Patents: 005

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 73667	A	19830309	EP 82304540	A	19820827	198311 B
US 4446430	A	19840501	US 81297594	A	19810831	198420
CA 1193658	A	19850917				198542
EP 73667	B	19860326				198613
DE 3270122	G	19860430				198619

Priority Applications (No Type Date): US 81297594 A 19810831

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
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EP 73667	A	E	13		
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Designated States (Regional): BE CH DE GB LI

EP 73667	B	G			
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Designated States (Regional): BE CH DE GB LI

NMR spectrometer **sample spinner**...

...Abstract (Basic): Spinner comprises a stator with a chamber **holding** a gas-driven rotor with channels supplying gas to the gas turbine section and to support and thrust gas bearing regions. The rotor is cylindrical with radial flutes around its **outside** surface opposite the channels. The rotor is supported at both ends by support bearings and...

...of graphite-filled polyimide or polyoxymethylene, the inner races reinforcing the rotor and inner and **outer** races being replaceable. **Outer** races are pref. of electrical conductive metal which shields the **NMR** of the polymeric material. The bearings increase rotor stability and reduce wear.

Title Terms: **NMR** ;

35/3,K/27 (Item 9 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2005 Thomson Derwent. All rts. reserv.

NA IAF 5-12-2005

003070022

WPI Acc No: 1981-H0061D/198130

**Cyclic data acquisition and NMR instrument control system - uses
feedback fifo buffer for sequentially advancing towards output register
command words specifying appts. states and persistence time**

Patent Assignee: VARIAN ASSOC INC (VARI)

Inventor: BERKOWITZ E H

Number of Countries: 005 Number of Patents: 011

Patent Family:

Patent No	Kind	Date	Applicat.No	Kind	Date	Week	
WO 8101881	A	19810709				198130	B
EP 42411	A	19811230	EP 80106426	A	19801208	198202	
JP 56501855	W	19811217				198205	
US 4375676	A	19830301	US 82353263	A	19820301	198311	
US 4481608	A	19841106	US 84588834	A	19840312	198447	
US 4525673	A	19850625				198528	
EP 201900	A	19861120	EP 80900244	A	19801208	198647	
EP 42411	B	19871028				198743	
DE 3072046	G	19871203				198749	
EP 201900	B1	19920819	EP 86106426	A	19801208	199234	
DE 3072203	G	19920924	DE 3072203	A	19801208	199240	
			EP 86106426	A	19801208		

Priority Applications (No Type Date): US 79107106 A 19791226; US 82353263 A
19820301

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

WO 8101881 A E 24

Designated States (National): JP

Designated States (Regional): DE FR GB

EP 42411 A E

Designated States (Regional): DE FR GB

EP 201900 A E

Designated States (Regional): DE FR GB

EP 42411 B E

Designated States (Regional): DE FR GB

EP 201900 B1 E 10 G06F-015/20 Related to patent EP 42411

Designated States (Regional): DE FR GB

DE 3072203 G G06F-015/20 Based on patent EP 201900

Cyclic data acquisition and NMR instrument control system...

...Abstract (Basic): In the cyclic data acquisition and instrument control system, partic. for a Fourier transform NM2 **spectrometer**, a queue of command words which specify the series of states of the apparatus, and ...

...or system processors (20) is provided to automatically acquire and evaluate incoming information from the **spectrometer** and also to issue outgoing signals to maintain the condition of the **spectrometer** and control the acquisition sequence. The functions are accommodated by having the computer respond to...

...Abstract (Equivalent): sequentially between said input register and said output register, each said register being adapted to **hold** a digital word, each said digital word comprising a plurality of bits, means (32)

for...

...responsive to a persistence portion of the digital word transferred to said output register for **retaining** the content of said sequence buffer for an interval of time determined by said persistence...

...Abstract (Equivalent): leaved control and data acquisition cycles, each FIFO word has a state portion for commanding **external** devices, a persistence portion for specifying the duration of selected state active in the FIFO...

...interleaved control and data acquisition cycles, each FIFO word has a state portion for commanding **external** devices and a persistence portion for specifying the duration of a selected state active in...

...USE/ADVANTAGE - Partic. in FT- **NMR** spectroscopy. Efficient data acquisition and control of instrument parameters of Fourier transform **spectrometer** . (8pp)p

...Title Terms: **NMR** ;

International Patent Class (Additional): **G01N-024/08** ...

35/3,K/28 (Item 10 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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NA TAF 5-12-2005

003067096

WPI Acc No: 1981-G7134D/198129

Spectrometer **specimen thermostatic control appts.** - has coaxial pipe communicating at one end with mixing chamber having evaporator for source of cryogenic liquid vapours

Patent Assignee: AS CHEM PHYS INST (ASCH-R)

Inventor: KRINSKII I V; TRUBNIKOV G R; VOROBEOV V I

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
SU 767636	B	19800930				198129 B

Priority Applications (No Type Date): SU 2656842 A 19780821

Spectrometer **specimen thermostatic control appts.**...

...Abstract (Basic): Appts. for thermostatic control of a specimen in the resonator of an EPR radio- **spectrometer** and including a heater, thermo-resistor, immersible heat-exchanger, a source of cryo-liq. vapours, electric evaporator and a press. regulator has greater accuracy in **holding** the temp. of the specimen with reduced consumption of cryo-liq. also in **NMR spectrometers** , spectrophotometers and in studying temperature dependence of luminescence...

...cryo-liq., and a pipe within this source is formed by two coaxial pipes, the **outer** one communicating at one end with a mixing chamber which accommodates the evaporator, and the...

?

10689660

36/3,K/1 (Item 1 from file: 2)

DIALOG(R)File 2:INSPEC

(c) 2005 Institution of Electrical Engineers. All rts. reserv.

03736829 INSPEC Abstract Number: A90136279

Title: Novel high-frequency resonator for NMR imaging and spectroscopy

Author(s): van Vaals, J.J.; Bergman, A.H.

Author Affiliation: Philips Res. Labs., Eindhoven, Netherlands

Journal: Journal of Magnetic Resonance vol.89, no.2 p.331-42

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Language: English

Subfile: A

Title: Novel high-frequency resonator for NMR imaging and spectroscopy

Abstract: A new type of RF coil for NMR imaging and spectroscopy is described. The resonator is simple to assemble and is particularly suited

...

...such lines, preferably at $1/4$ lambda from the open end. At this position the **outer** conductors are enlarged and coincide to serve as a Faraday shield, enclosing the inner conductors...

... good homogeneity. The coil is very efficient, has minimum electric coupling, and is capable of **handling** high RF powers. By adjusting the total length of the transmission lines it is possible...

... 270 MHz coil with inner diameter of 7 cm are given, and experimental in vivo **NMR** results using this probe in a horizontal-bore 6.3 T animal system are presented.

Descriptors: nuclear **magnetic resonance** spectroscopy...

... **spectrometer** components and accessories

Identifiers: **NMR** spectroscopy...

...in vivo **NMR** experiments...

... **NMR** imaging...

... **outer** conductors

36/3,K/2 (Item 1 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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015855711 **Image available**

WPI Acc No: 2004-013541/200402

XRAM Acc No: C04-004375

XRPX Acc No: N04-010086

Nuclear spin resonance spectrometer, for structural analysis of chemical compounds, comprises sample sleeve surrounding sample tube, and handling unit with fingers for handling sample sleeve

Patent Assignee: BRUKER BIOSPIN AG (BRUK-N)

Inventor: FEY M; HIMMELSBACH K; HOCHSTRASSER R; TSCHIRKY H

NA TAF 5-12-2005

Applicant's own Application
Not Prior Art TAF 5-12-2005

Number of Countries: 002 Number of Patents: 002

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
DE 20314517	U1	20031120	DE U20314517	U	20030919	200402 B
US 20050062474	A1	20050324	US 2003689660	A	20031022	200526

Priority Applications (No Type Date): DE U20314517 U 20030919

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

DE 20314517 U1 21 G01R-033/30

US 20050062474 A1 G01V-003/00

Nuclear spin resonance spectrometer , for structural analysis of chemical compounds, comprises sample sleeve surrounding sample tube, and handling unit with fingers for handling sample sleeve

Abstract (Basic):

... Nuclear spin resonance **spectrometer** comprises a sample sleeve surrounding a sample tube and having a bore into which the tube is inserted. The sample sleeve has grooves on its **outer periphery** . A **handling** unit enables **handling** of the sample sleeve and has fingers. At least one groove is structured so that...

... Nuclear spin resonance **spectrometer** comprises a sample sleeve (1) surrounding a sample tube and having a bore into which...

...runs along the cylinder axis. The sample sleeve has grooves (2, 3a, 3b) on its **outer periphery** . A **handling** unit enables **handling** of the sample sleeve and has fingers. At least one groove (2) is structured so that the fingers can be inserted into the groove. The fingers press on both **outer** edges of the groove when the **handling** unit is closed...

...An INDEPENDENT CLAIM is also included for a sample sleeve used in the **spectrometer** .

...The sample sleeve can be easily and safely **handled** .

Technology Focus:

... Preferred **Spectrometer** : The **handling** unit has at least four fingers which each have a conical or round attachment radially...

...Title Terms: **HANDLE** ;

...International Patent Class (Main): **G01V-003/00**

36/3,K/3 (Item 2 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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015330782 **Image available**

WPI Acc No: 2003-391717/200337

XRAM Acc No: C03-104052

XRPX Acc No: N03-312891

Nuclear magnetic resonance sample holder for nuclear magnetic resonance spectrometer liquid microsamples, comprises rotor, cylindrical plunger, hollow cylindrical sample tube, clamp , and seal

Patent Assignee: BRUKER BIOSPIN GMBH (BRUK-N)

Inventor: BRAUMANN E U; HOFMANN M

Number of Countries: 003 Number of Patents: 004

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 20020196023	A1	20021226	US 2002161746	A	20020605	200337 B

TAF 5-12-2005
N/A

Not Applicable
This is Applicant's instant Application

New Applicable = N/A
TAF 5-12-2005

DE 1020130283	C1	20030313	DE 12001030283	A	20010626	200337
GB 2381316	A	20030430	GB 200214530	A	20020624	200337
US 6741079	B2	20040525	US 2002161746	A	20020605	200435

Priority Applications (No Type Date): DE 12001030283 A 20010626

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing	Notes
US 20020196023	A1		17	G01V-003/00		
DE 1020130283	C1			G01R-033/30		
GB 2381316	A			G01R-033/30		
US 6741079	B2			G01V-003/00		

Nuclear magnetic resonance sample holder for nuclear magnetic resonance spectrometer liquid microsamples, comprises rotor, cylindrical plunger, hollow cylindrical sample tube, clamp, and seal

Abstract (Basic):

... A nuclear **magnetic resonance** sample holder comprises a rotationally symmetrical rotor having a central bore with a conical end region; a...

...thicker and thinner region; a hollow cylindrical sample tube made of glass or quartz; a **clamp** with a cylindrical part and a central blind hole; and a seal installed within the **clamp**.

... A nuclear **magnetic resonance** (**NMR**) sample holder (1) for an **NMR spectrometer** with liquid microsamples comprises...

...glass or quartz, having a closed and an open end, the tube having a constant **outer** diameter of less than 11 mm along its entire length...

...4) a **clamp** with a cylinder part that fits into the central bore of the rotor, and a central blind hole located at a second **clamp** end; and...

...5) a seal installed within the **clamp** to seal the open end of the sample tube in a gas-tight manner after...

...The plunger comprises a mounting mechanism at an inserted end of the thinner region. The **clamp** cooperates with the mounting mechanism at a first **clamp** end. It has an **outer** cone with spreading fingers structured for **clamping** within the conical end region of the central bore, centering and safely **holding** the sample tube. The central blind hole is slightly larger than the constant **outer** diameter of the sample tube, to accept the sample tube within an inner bore of the blind hole of the **clamp**.

...

...An INDEPENDENT CLAIM is included for a method for filling the inventive **NMR sample holder** comprising filling a liquid microsample into the sample tube, pushing the **clamp** over the sample tube, inserting the plunger into the central bore of the rotor, inserting the sample tube into the blind hole and screwing a thread of the **clamp** into a mating thread on the movable plunger mounting section...

...For an **NMR spectrometer** with liquid microsamples...

...The inventive **NMR sample holder** permits automatic **spectrometer** operation, providing simpler, safer and improved **handling**. The **NMR sample holder** is less susceptible to centering errors, where the amount of evaporated liquid sample is to...

...The figures show an overall view of the sample **holder** and an overall view of the sample **holder** with a released sample tube...

...Nuclear magnetic resonance sample holder (1
Technology Focus:

... has a total length of 90-130 mm. The cylindrical regions of the
rotor have outer diameters of 25 and 17 mm, respectively. The thicker
region of the plunger has a...

...Preferred Material: The rotor, plunger, seal and/or clamp comprise a
plastic material comprising a small amount of protons. The plastic
material is Teflon...

...Title Terms: **HOLD** ;

...International Patent Class (Main): **G01V-003/00**

International Patent Class (Additional): **G01N-024/08**

36/3,K/4 (Item 3 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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015239470 **Image available**

WPI Acc No: 2003-300396/200329

XRAM Acc No: C03-078098

XRPX Acc No: N03-239106

**Apparatus for performing electrochemical assay or a reaction, comprises a
micro-chip possessing a microstructure having a tip end adapted for fluid
uptake or discharge and a microfluidic control unit**

Patent Assignee: DIAGNOSWISS SA (DIAG-N); MICHEL P (MICH-I); REYMOND F
(REYM-I); ROSSIER J S (ROSS-I)

Inventor: MICHEL P; REYMOND F; ROSSIER J S

Number of Countries: 101 Number of Patents: 005

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 200304160	A1	20030116	WO 2002IB3220	A	20020704	200329 B
EP 1404448	A1	20040407	EP 2002765157	A	20020704	200425
			WO 2002IB3220	A	20020704	
AU 2002329526	A1	20030121	AU 2002329526	A	20020704	200452
US 20040166504	A1	20040826	WO 2002IB3220	A	20020704	200457
			US 2003481152	A	20031217	
JP 2005501231	W	20050113	WO 2002IB3220	A	20020704	200506
			JP 2003510164	A	20020704	

Priority Applications (No Type Date): GB 200116384 A 20010704

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

WO 200304160 A1 E 46 B01L-003/00

Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA
CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN
IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ
OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU
ZA ZM ZW

Designated States (Regional): AT BE BG CH CY CZ DE DK EA EE ES FI FR GB
GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SK SL SZ TR TZ UG ZM ZW

EP 1404448 A1 E B01L-003/00 Based on patent WO 200304160

Designated States (Regional): AL AT BE BG CH CY CZ DE DK EE ES FI FR GB
GR IE IT LI LT LU LV MC MK NL PT RO SE SI SK TR

AU 2002329526 A1 B01L-003/00 Based on patent WO 200304160

US 20040166504 A1 C12Q-001/68

JP 2005501231 W 66 G01N-027/06 Based on patent WO 200304160

Abstract (Basic):

W/A TAF 5-12-2005

... injected into a purification, separation and/or detection device, for e.g. a chromatograph, a **spectrometer**, a photometer, a gel, a column, a selective membrane, a filter or an electrophoretic separation...

...mass spectrometry. The apparatus comprises units to desalt samples prior to injection into a mass **spectrometer** by generation of an electrospray or prior to dispense of the samples onto a matrix...

Technology Focus:

... embossing, plasma etching, elastomer casting and/or silicone technology. (I) further comprises a detector disposed **outside** the microstructure, the detector being interfaced with the microchips where the detector is photomultiplier, a mass **spectrometer** or a nuclear **magnetic resonance (NMR)** system. The microstructure comprises a microchannel, or a network or array of interconnected microchannels where...

...by a fluid reservoir (18). The tip comprises an electrode. The supporting unit comprises a **clamping** system to ensure fluid-tight connection between the microfluidic connection end(s) and the microfluidic...

36/3,K/5 (Item 4 from file: 350)
 DIALOG(R)File 350:Derwent WPIX
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010474464 **Image available**
 WPI Acc No: 1995-375784/199549
 XRAM Acc No: C95-162713
 XRPX Acc No: N95-277260

N/A TAF 5-12-2005

NMR spectrometer microlitre sample holder - comprises rotor with central blind threaded bore for receiving sample tube with screw engaging thread and centring tube and having seal between tube and bore
 Patent Assignee: BRUKER ANALYTISCHE MESSTECHNIK GMBH (BRUK-N); BRUKER ANALYTIK GMBH (BRUK-N)

Inventor: HOFMANN M; SPRAUL M
 Number of Countries: 003 Number of Patents: 005
 Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
GB 2289341	A	19951115	GB 958539	A	19950427	199549 B
DE 19509062	A1	19951123	DE 1009062	A	19950314	199601
US 5517856	A	19960521	US 95435879	A	19950505	199626
DE 19509062	C2	19970213	DE 1009062	A	19950314	199711
GB 2289341	B	19980408	GB 958539	A	19950427	199816

Priority Applications (No Type Date): DE 4416612 A 19940511

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
GB 2289341	A		26	G01R-033/30	
DE 19509062	A1		10	G01R-033/30	
US 5517856	A		10	G01R-033/20	
DE 19509062	C2		10	G01R-033/30	
GB 2289341	B			G01R-033/30	

NMR spectrometer microlitre sample holder -

...Abstract (Basic): A sample **holder** is provided for an **NMR spectrometer** for microlitre range samples comprising a rotor with a central blind base with an internal...

...screw engageable with the thread of the rotor bore and having a central bore for **holding** the tube and centring it; and a sealing element which is a sliding fit on...

...Abstract (Equivalent): A sample **holder** is provided for an **NMR spectrometer** for microlitre range samples comprising a rotor with a central blind base with an internal...

...screw engageable with the thread of the rotor bore and having a central bore for **holding** the tube and centring it; and a sealing element which is a sliding fit on...

...Abstract (Equivalent): A sample **holder** for an **NMR spectrometer** for liquid samples in the microlitre range comprises...

...hollow cylindrical sample tube having a closed end and an open end, and having an **outer** diameter of less than 3 mm, the diameter being such as to enable the sample...

...a centring screw having an **external** thread adapted to engage the said internal thread of the central rotor bore and a...

Title Terms: **NMR** ;

International Patent Class (Additional): **G01N-024/08**

36/3,K/6 (Item 5 from file: 350)
 DIALOG(R)File 350:Derwent WPIX
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N/A Tar 5-12-2005

008866131 **Image available**
 WPI Acc No: 1991-370157/199151
 XRPX Acc No: N91-283376

Sample head for nuclear magnetic resonance spectrometer - has coil arrangement with earth lead contg. capacitor
 Patent Assignee: BRUKER ANALYTISCHE MESSTECHNIK (BRUK-N)
 Inventor: ZEIGER H
 Number of Countries: 002 Number of Patents: 003
 Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
DE 4018657	A	19911212	DE 4018657	A	19900611	199151 B
US 5180982	A	19930119	US 91710563	A	19910605	199306
DE 4018657	C2	19930415	DE 4018657	A	19900611	199315

Priority Applications (No Type Date): DE 4018657 A 19900611
 Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 5180982	A		7	G01R-033/20	
DE 4018657	C2		6	G01R-033/30	

Sample head for nuclear magnetic resonance spectrometer -

...Abstract (Basic): When the coil arrangement has three coil portions , pref. one. lead is connected to the **outer** end of the first coil portion and to the centre-point between the second and third coil portions, while the other lead is connected to the **outer** end of the third coil portion and to the centre-point between the first and...

...Abstract (Equivalent): The probehead for a nuclear **magnetic resonance spectrometer** comprises a coil structure defining an axis and having a first, a second, and a...

...high-frequency source. Adjacent sub-coils are wound in an opposite winding direction. A sample **holder** is arranged within the centre of the middle sub-coil...

International Patent Class (Additional): **G01N-024/08** ...

36/3,K/7 (Item 6 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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N/A TAF
5-12-2005

008456821 **Image available**
WPI Acc No: 1990-343821/199046

Pressure relief cover for cryostats for NMR spectrometer - having easy introduction of locking device into tank opening, with catch having noses engaging behind opening

Patent Assignee: SPECTROSPIN AG (SPEC-N)
Inventor: MRAZ B
Number of Countries: 003 Number of Patents: 004
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
GB 2231381	A	19901114	GB 9010796	A	19900514	199046 B
DE 3915788	C	19901115	DE 3915788	A	19890513	199046
US 5094084	A	19920310	US 90521606	A	19900510	199213
GB 2231381	B	19930120	GB 9010796	A	19900514	199303

Priority Applications (No Type Date): DE 3915788 A 19890513

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 5094084	A		8		
GB 2231381	B			F16J-013/24	

Pressure relief cover for cryostats for NMR spectrometer -

...Abstract (Basic): additional nitrogen tank and a vacuum section, have a pressure relief cover arranged at the **outside** of the tank wall of the cryostat for closing an opening, such as are used to house the superconductive magnet coil of an **NMR spectrometer**. A locking device (7) is provided by which the pressure-relief cover (4) is **retained** in position on the tank wall (1) of the cryostat and which, in its closed...

...Abstract (Equivalent): The cryostat has an excess pressure cap (4) mounted on the **outside** of the container wall of the cryostat for sealing an orifice which links the cryostat...

...Abstract (Equivalent): additional nitrogen tank and a vacuum section, comprising a pressure-relief cover arranged at the **outside** of the tank wall of the cryostat for closing an opening therein, wherein a locking device (7) is provided by which the said pressure-relief cover (4) is **retained** in position on the tank wall (1) of the said cryostat and which, in its...

...Abstract (Equivalent): a pressure-relief cover (4) sealing the tank wall opening (2) and mounted on the **outside** (5) of the tank wall (1). A locking device (7) comprises U-shaped guide (8)...

...Title Terms: **NMR** ;

36/3,K/8 (Item 7 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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007821553 **Image available**
WPI Acc No: 1989-086665/198912

XRPX Acc No: N89-066080

Spectrometer **cryomagnet enabling insertion and removal of sample - uses pressurised air for feeding sample holder between access position and measuring zone**

Patent Assignee: SPECTROSPIN AG (SPEC-N)

Inventor: KUSTER A

Number of Countries: 006 Number of Patents: 006

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
DE 3729819	A	19890316	DE 3729819	A	19870905	198912 B
EP 308654	A	19890329	EP 88113492	A	19880819	198913
US 4859948	A	19890822	US 88238043	A	19880829	198942
DE 3729819	C	19911107				199145
EP 308654	B	19920401	EP 88113492	A	19880819	199214
DE 3869713	G	19920507	DE 3729819	A	19870905	199220

Priority Applications (No Type Date): DE 3729819 A 19870905

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
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DE 3729819	A		8		
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EP 308654	A	G			
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Designated States (Regional): CH DE FR GB LI

US 4859948	A		8		
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EP 308654	B		11		
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Designated States (Regional): CH DE FR GB LI

Spectrometer **cryomagnet enabling insertion and removal of sample...**

...uses pressurised air for feeding sample holder between access position and measuring zone

...Abstract (Basic): central space (1) aligned with the latter contg. a guide sleeve (3) enclosing the sample **holder** (4). The guide sleeve is coupled at its base to a pressurised air source (6), which is operated to force the sample **holder** out through the top of the guide sleeve to allow the sample to be replaced...

...the top of the guide sleeve, operated by a manually accessible device, allows the sample **holder** to be removed and replaced via a second angled tube (15) lying **outside** the field of the cryomagnet, which can also be coupled to the pressurised air source...

...Abstract (Equivalent): Apparatus for supplying a sample carrier (4, 44) in the case of an **NMR spectrometer** comprising an intense field cryomagnet (2, 41) which has a vertically disposed axis and generates

...the upper end of the guide tube (3, 43) to an easily accessible point lying **outside** the magnet arrangement and is there provided with a closable opening for inserting and removing...

...Abstract (Equivalent): In the **NMR spectrometer** comprising a cryo-magnet with vertical axis, the sample to be examined is introduced into...

...Title Terms: **HOLD** ;

...International Patent Class (Additional): **G01N-024/08**

36/3,K/9 (Item 8 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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NA TAF 5-12-2005

003892705

WPI Acc No: 1984-038246/198407

XRPX Acc No: N84-029027

Selective activation system for trimming superconducting magnet - uses superconducting persistence switches in cryostat connected to decoding circuit

Patent Assignee: VARIAN ASSOC INC (VARI)

Inventor: ANDERSON M H; KNEIP G D; LEE R L

Number of Countries: 004 Number of Patents: 007

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
DE 3328369	A	19840209	DE 3328369	A	19830805	198407 B
GB 2125632	A	19840307	GB 8320089	A	19830726	198410
JP 59034604	A	19840225	JP 83128097	A	19830715	198414
US 4535291	A	19850813	US 82406418	A	19820809	198535
GB 2168852	A	19860625	GB 86163	A	19860106	198626
GB 2125632	B	19861203				198649
GB 2168852	B	19861231				198652

Priority Applications (No Type Date): US 82406418 A 19820809

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
DE 3328369	A		20		

...Abstract (Basic): There is a crystal which isolates a number of superconducting persistence switches (94) and which **holds** them at a suitable low temp. There are N switches, and there is a different number K of conductors to produce a connection between the **outside** of the crystal and its inside to activate the switches...

...a resistor (96). The system may be used to control the magnets of a Nuclear **Magnetic resonance spectrometer**. The system suffers minimal heat loss.

International Patent Class (Additional): G01N-024/08 ...

?

N/A 5-12-2005 TAF